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Quality of Ground Water in Southeastern and South-Central Washington, 1982

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 84-4262

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GEOLOGICAL SURVEY

QUALITY OF GROUND WATER IN SOUTHEASTERN AND SOUTH-CENTRAL WASHINGTON, 1982

By G. L. Turney

U.S. GEOLOGICAL SURVEY

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Tacoma, Washington
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GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to:

District Chief
U.S. Geological Survey
1201 Pacific Avenue - Suite 600
Tacoma, Washington 98402-4384

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QUALITY OF GROUND WATER IN SOUTHEASTERN AND SOUTH-CENTRAL WASHINGTON, 1982

By G. L. Turney

ABSTRACT

Ground water from more than 100 sites in southeastern-south central Washington was sampled and analyzed in 1982 for pH, specific conductance, and concentrations of fecal-coliform bacteria, major dissolved ions, and dissolved iron, manganese, and nitrate. Twenty percent of the samples were analyzed for concentrations of dissolved trace metals, including aluminum, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc.

The predominant water type was calcium bicarbonate. Some sodium bicarbonate water samples were found in the Lower Yakima, Horse Heaven Hills, and Walla Walla-Tucannon subregions. Dissolved-solids concentrations were typically less than 500 mg/L (milligrams per liter). Median iron and manganese concentrations were less than 20 ug/L (micrograms per liter) except in the Palouse subregion, where the median concentration of iron was 200 ug/L and the median concentration of manganese was 45 ug/L. Generally, trace-metal concentrations were also less than 10 ug/L except for barium, copper, and zinc. Nitrate concentrations were less than 1.0 mg/L in water from half the wells sampled, however, concentrations greater than 5.0 mg/L were found in large areas of the Lower Yakima, Hanford, Horse Heaven Hills and Walla Walla-Tucannon subregions. No fecal-coliform bacteria were detected.

The constituents that exceeded U.S. Environmental Protection Agency drinking water regulations were nitrate, dissolved solids, pH, and fluoride, and were primarily in agricultural or industrial areas.

The historical data for the region were also evaluated for the same constituents. Quantitative differences were found between historical data and 1982 data, but they may be due to inconsistencies in data collection or analytical methods. Generally, historical and 1982 data lead to similar qualitative conclusions about the quality of ground water in southeastern-south central Washington.

INTRODUCTION

The State of Washington Department of Ecology (WDOE) is responsible for the protection and management of ground water in the State of Washington. The WDOE also makes decisions regarding drilling permits, pumpages, and water rights. To aid in meeting these responsibilities, a statewide assessment of ground-water quality was made.

Purpose and Scope

In 1979, the U.S. Geological Survey, in cooperation with the WDOE, established a ground-water-quality assessment program for Washington. The State was divided into five regions on the basis of work by Molenaar and others (1980); one region would be studied each year over a 5-year period. Approximately 100 wells would be sampled once within each region, and the water analyzed for common water-quality constituents. The data from these analyses would be compared with historical data from wells in the same region. This compilation of data could then be used by the WDOE to assess the general ground-water quality for a given region, and to detect any major water-quality changes that might have occurred. The data also would provide a basis of comparison for future regional studies.

This report presents ground-water quality data for the southeastern-south central region. Three of the other four regions--the northeastern-north central, southwestern, and the Puget Sound--are discussed in separate Survey publications by Ebbert (1984), Ebbert and Payne (1985), and Turney (1986). The remaining region, the Columbia Basin, will be discussed in a forthcoming report.

Other Studies

Several ground-water and geologic studies have been made in local areas within the region (Foxworthy, 1962; Foxworthy and Washburn, 1963; Newcomb, 1965; Walters and Glancy, 1969; and Fretwell, 1979). Statewide and nationwide studies have also included the southeastern-south central region, often as part of the Columbia Basin. These include VanDenburgh and Santos (1965), Foxworthy (1979), Molenaar and others (1980), and Lum and Turney (1983).

Ground-water studies in the Horse Heaven Hills and Hanford subregions were conducted simultaneously with this study. To avoid duplication of effort, the data from these two concurrent studies have been incorporated into the data base for the southeastern-south central region.

Acknowledgments

Appreciation is expressed to the city and town officials, local agencies, and private landowners whose cooperation in granting access to their wells was essential the project.

DESCRIPTION OF THE REGION

Location

The southeastern-south central region of Washington consists of the Yakima River and Walla Walla River drainages and parts of the Columbia River and Snake River drainages. The region (fig. 1) is bounded on the east by the Idaho state line, on the south by the Oregon state line and the Columbia River, and on the west by the crest of the Cascade Range. The northern boundary follows the Kittitas-Chelan county line to the Columbia River, then the Columbia River southeast to the confluence of the Columbia and Snake Rivers near Pasco. At this point the boundary follows the Snake River, then the Palouse River. The northeastern boundary follows the Palouse River drainage divide, which is roughly the western and northern boundaries of Whitman County, to the state border.

The region was divided into eight subregions on the basis of work by Molenaar and others (1980)--the Upper Yakima, Lower Yakima, Hanford, Klickitat, Horse Heaven Hills, Walla Walla-Tucannon, Palouse and Blue Mountains subregions. Molenaar originally grouped the first three subregions together, but for this study the area was too large to discuss as one subregion. The division between the Upper and Lower Yakima subregions was arbitarily placed along Umtanum Ridge. The Hanford and Lower Yakima subregions are separated by Cold Creek valley.

Climate

The climate of the southeastern-south central region is influenced primarily by the Cascade Range and the Rocky Mountains. These ranges serve as barriers for precipitation that moves into the region from either the Pacific Ocean or the midcontinent, depending upon the time of year (Phillips, 1960). The result is a fairly dry climate with large seasonal temperature variations. Areal climatological differences are found in the region and are due to local topography. Precipitation and temperature data at several locations in the study area are given in the following table (Phillips, 1960).

	Mean air temperature (^{o}F)			Mean precipitation, in inches
	January	July	Annual	Annual
Goldendale	29.4	66.9	48.4	17.41
Cle Elum Lake	26.0	64.3	45.1	36.49
Yakima	27.5	71.0	49.8	7.86
Sunnyside	30.2	72.1	51.7	6.90
Kennewick	31.8	75.1	53.6	7.49
Walla Walla	33.2	76.0	54.2	15.50
Colfax	29.2	67.8	48.4	20.97

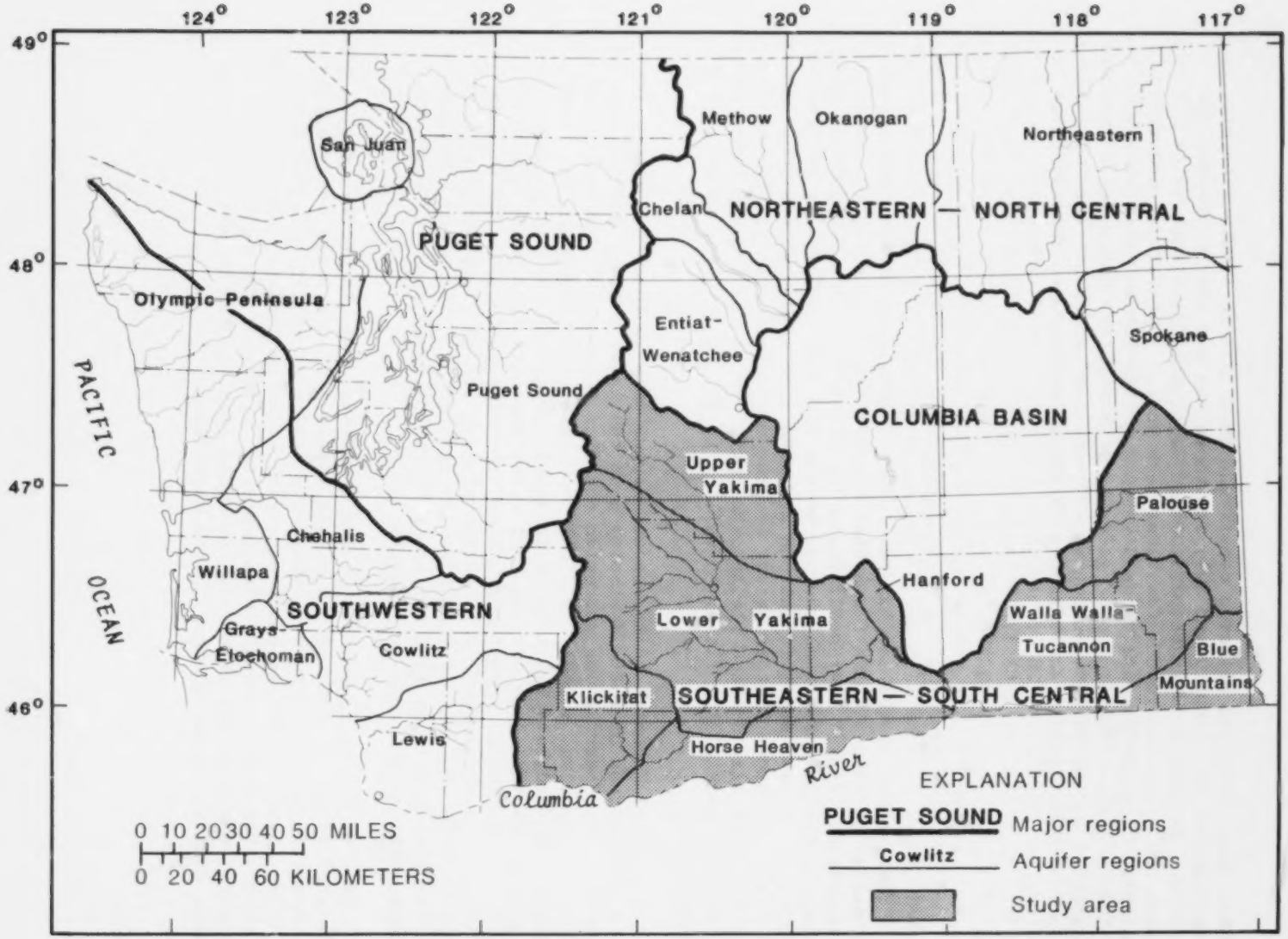


FIGURE 1.--Location of study area and boundaries of major aquifers and aquifer regions.

These data represent climatic conditions from 1931 to 1960. Mean air temperatures for January and July are shown because they represent the extremes in mean monthly temperatures. Temperature extremes below 0°F and above 100°F are recorded a few times each year. Temperatures generally increase from the Cascade Range down through the Yakima River valley to the Columbia River. They increase going east through the Walla Walla-Tucannon subregion to the Palouse subregion. Precipitation follows a reverse pattern, decreasing from the Cascades to the Columbia, then increasing up to Colfax.

Geology

The geology of the southeastern-south central region was influenced primarily by several lava flows that covered most of the region (Swanson and Wright, 1978). They occurred during the Miocene epoch and often combined to create formations ranging from a few feet to hundreds of feet in thickness. These basalt formations are separated from each other by layers of clays and sands that represent erosion deposits on top of the underlying flows. Late Pliocene and Pleistocene uprisings of the Cascade Range caused sloping in some of the flows, as well as folds, faults, and other geologic deformations.

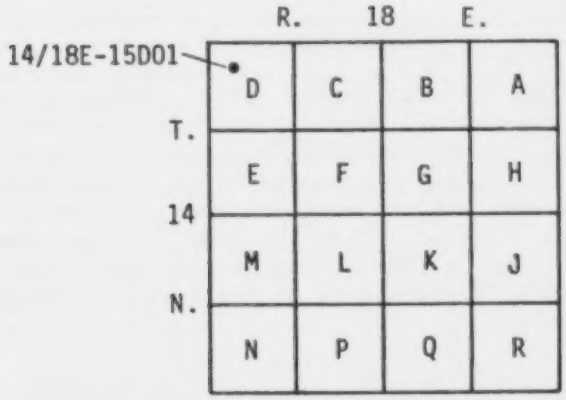
Surficial deposits on the basalt layers vary in thickness from a few feet to hundreds of feet, depending upon the local geology and the type of deposit. The Upper Yakima subregion contains substantial unconsolidated alluvial deposits, especially along the Yakima River valley. The Lower Yakima, Hanford, and Walla Walla-Tucannon subregions contain alluvial deposits, as well as older unconsolidated deposits that were left by Pleistocene glacial flooding (Huntting and others, 1961). The Palouse subregion is characterized by surficial deposits of windblown silt, or loess, which are locally more than 100 feet thick. The other subregions either have basalt at land surface or unconsolidated deposits that are unimportant as ground-water sources.

Most of the wells drilled in the southeastern-south central region were finished in one or more of the basalt layers. Ground water is generally abundant in interflow zones between the layers of basalt. In the Upper Yakima, Lower Yakima, Hanford, and Walla Walla subregions, many wells tap ground water from unconsolidated deposits. (Many of the wells in the Hanford subregion are test wells designed specifically to monitor ground-water quality in the unconsolidated material.)

METHODS

Well- and Spring-Numbering System

The numbering system used by the U.S. Geological Survey in the state of Washington is based on the rectangular subdivision of public land, which indicates township, range, section, and 40-acre tract within the section. For example, in well number 14/18E-25D01, the part preceding the hyphen indicates the township and range (T. 14 N., R. 18 E.) north and east of the Willamette base line and meridian, respectively. (Because all wells in Washington are north of the base line, the "N" designation of the township is omitted.) The first number following the hyphen (25) indicates the section, and the letter (D) gives the 40-acre tract within that section. The last number (01) is the serial number of the well in that particular 40-acre tract. In spring designations, the serial number is followed by the letter "S". If a well has been deepened, the serial number is followed by the letter "D" and a number indicating the sequence of the deepening. For example, if 14/18E-25D01 had been deepened twice, it would now be numbered 14/18E-25D01D02.



Section 15

Well Selection

Several factors were considered when selecting wells to sample. The primary concern was to obtain a good areal representation of the region. Sampling was intense in areas where ground-water use is high and, conversely, areas of little or no ground-water use were not sampled. Priority also was given to areas with little or no historical data. Areas with known water-quality problems, such as excessive concentrations of nitrate, were sampled more heavily. Where applicable, a representative number of both basalt and unconsolidated wells was sampled, but individual soil types and aquifers were not of major concern in this study. Wells of various depths were sampled also. For deeper wells, an attempt was made to sample cased wells with deep perforation intervals (as opposed to uncased, open holes), but such wells were not always available. Whenever possible, municipal or irrigation wells were sampled because of ease of access.

Using the outlined criteria, 95 wells throughout the southeastern-south central region were selected and sampled. Data from concurrent studies in the Horse Heaven Hills and in the Hanford subregions were added to this data base, bringing the total number of project wells to 134. Plate 1 shows the location of each well sampled and whether it is finished in unconsolidated material or in basalt. Township and range locations of the wells are indicated on the map and the section number, 40-acre tract designation, and serial number are given next to each well symbol.

Sampling

All wells were sampled in early summer, 1982. Sampling was done according to standardized Geological Survey procedures, as described in the "National Handbook of Recommended Methods for Water-Data aquisition" (U.S. Geological Survey, 1977). Wells were pumped prior to sampling for a period sufficient to flush all supply lines and to insure that water being sampled was representative of the aquifer. With the pump running, samples were taken from the tap or discharge tube closest to the well head. Samples were preserved in the field for analysis at the Survey's Water Quality Laboratory in Arvada, Colo.

Field and Laboratory Analyses

Field determinations for specific conductance, pH, and fecal-coliform bacteria were made at the time of sampling. Values of hardness, sodium-adsorption ratio, and dissolved solids were calculated from the constituents analyzed. About 20 percent of the samples were analyzed for trace-metal concentrations.

The samples from the Hanford subregion were also analyzed for various radiochemical constituents. These data were not included in this report because radiochemical constituents are beyond the scope of this study. Significant concentrations of radiochemical constituents in Washington ground water are generally limited to the Hanford nuclear energy facility that occupies most of the Hanford subregion. The radiochemical data for these and other well samples from the Hanford facility are available in a report by Eddy and others (1983).

Data Presentation

The data generated by this study are presented on maps on five plates located in the packet at the end of the report:

Plate 1. Locations of sites with 1982 ground-water quality data
Plate 2. Water types and concentrations of dissolved solids in 1982
Plate 3. Concentrations of iron, manganese, and trace metals in 1982
Plate 4. Concentrations of nitrate in 1982
Plate 5. Locations of sites with historical (pre-1982) ground-water quality data.

Tables containing both 1982 and historical data, tabulated by sub-region, and data summaries pertinent to the plates are located at the end of the report.

DRINKING WATER REGULATIONS

The EPA has established two sets of regulations that apply to drinking water. The national interim primary drinking water regulations (U.S. Environmental Protection Agency, 1976) include chemicals in water that can affect human health. These regulations apply to public water supplies and are enforceable by the EPA or the individual states. The national secondary drinking water regulations (U.S. Environmental Protection Agency, 1977a) pertain to the esthetic qualities of drinking water. They are guidelines only and are not legally enforceable by a Federal agency. Both sets of regulations are based on concentrations of chemicals in water, usually expressed in milligrams per liter (mg/L) or micrograms per liter (ug/L). The regulations for constituents discussed in this report are as follows:

Primary Drinking Water Regulations

Constituent	Maximum allowable concentration
Arsenic	50 ug/L
Barium	1,000 ug/L
Cadmium	10 ug/L
Chromium	50 ug/L
Fluoride	1.4-2.4 mg/L[1]
Lead	50 ug/L
Mercury	2 ug/L
Nitrate (as nitrogen)	10 mg/L
Selenium	10 ug/L
Silver	50 ug/L

Secondary Drinking Water Regulations

Constituent	Maximum allowable concentration
Chloride	250 mg/L
Copper	1,000 ug/L
Dissolved solids	500 mg/L
Iron	300 ug/L
Manganese	50 ug/L
pH	6.5-8.5 units[2]
Sulfate	250 mg/L
Zinc	5,000 ug/L

[1]The fluoride regulation varies because human water consumption varies with air temperature; as air temperature increases the maximum allowable fluoride concentration decreases (U.S. Environmental Protection Agency, 1977b).

[2]These figures represent an allowable range for pH values.

The rationales behind these regulations differ. Most of the metals are of concern because of their harmful and (or) esthetic effects on humans. Arsenic, barium, cadmium, chromium, lead, mercury, and selenium are all highly toxic to humans in relatively low concentrations. Arsenic is a known carcinogen and selenium is a suspected carcinogen. Silver is not toxic, but produces a condition in humans called argyria, a blue-gray discoloration of the skin, eyes, and mucous membranes. Zinc and copper, in addition to being toxic in extreme concentrations, impart a bitter taste to water in concentrations well below toxic levels.

Iron is an essential element for both plant and animal life and is commonly found in ground water. However, excessive concentrations can be harmful or even fatal to some forms of crops and aquatic life. The primary objections to high iron concentrations for human use are not health related, but esthetic. Iron concentrations exceeding 300 ug/L cause objectionable tastes and stain laundry and plumbing fixtures. Some industrial applications, such as paper production, food processing, and chemical production require that concentrations be even lower than 300 ug/L.

Manganese is also essential to both plant and animal life. Ingestion of high levels can be toxic to humans, however, and at concentrations substantially less than toxic levels the taste of the water is impaired. Concentrations greater than 50 mg/L can stain laundry and plumbing fixtures. Manganese compounds are quite common in ground water, often occurring in conjunction with iron.

Fluoride concentrations exceeding the approved limits can result in dental fluorosis, which is characterized by mottling of the teeth. Long-term, high-level exposures to fluoride (8-20 mg/L for several years) can cause bone changes and result in crippling, but these levels rarely have been found in the United States.

The nitrate regulation is based on the concentration at which the condition methemoglobinemia can occur in infants. This disease can result in suffocation of the infant because the oxygen-carrying capacity of hemoglobin is impaired by the presence of high nitrate concentrations. Older children and adults apparently are not affected.

Chloride and sulfate can be tasted in the water before harmful concentrations are reached. The secondary drinking water regulations are set at these taste-threshold levels. Moderate sulfate concentrations (600 mg/L) may act as a laxative on persons unaccustomed to such water, but the effect is usually temporary. Dissolved-solids concentrations can alter the taste of water and may be associated with other undesirable properties such as corrosiveness and hardness. Water with a low pH is corrosive, and water with a high pH has a bitter taste.

Drinking water regulations do not address fecal-coliform bacteria as a separate group. For purposes of this report, the presence of any fecal-coliform bacteria is assumed to indicate a potential health problem.

A more detailed discussion of most of the constituents can be found in "Quality Criteria for Water, 1976" (U.S. Environmental Protection Agency, 1977b). Instances in this study when drinking water regulation limits have been exceeded are discussed later on page 20.

QUALITY OF GROUND WATER IN SAMPLED WELLS

The water-quality characteristics of the sampled wells are summarized on plate 2. Statistical summaries for each subregion are presented in table 1, and basic data for each sampled well are included in tables 2 and 3. Some of the important water-quality characteristics are discussed in this section.

Water Types

The water type is based on the relative percentages of the major ions present and is shown on plate 2 for each well sampled. Major ions are usually grouped into positive ions and negative ions, or cations and anions. The major cations are calcium, magnesium, sodium, and potassium; the major anions are bicarbonate and carbonate (or alkalinity), chloride, sulfate, and nitrate. The water type is described by the predominant cation and anion concentrations. If one ion exceeded each of the others in its group by 10 percent or more, it was considered predominant. When no single ion was predominant but two ions greatly exceeded the rest, a combined water type was assigned. Unusual water types, or waters that showed no predominant type, are represented by a "mixed or unusual" category. The percentages of ions in each analysis are listed in table 4.

The predominant water types in southeastern-south central Washington were the bicarbonates of various cations. Calcium bicarbonate water was the most common and was found in all of the subregions. It predominated in the unconsolidated deposits of the Hanford and the Walla Walla-Tucannon subregions and in the basalts of the eastern Walla Walla-Tucannon subregion. Both calcium bicarbonate and calcium-magnesium bicarbonate water were common in the unconsolidated wells of the Upper and Lower Yakima subregions, as well as in the basalts of the Palouse subregion. Sodium bicarbonate water was widespread in the basalt wells of the Lower Yakima and Horse Heaven Hills subregions and in the western part of the Walla Walla-Tucannon subregion. The calcium-sodium bicarbonate water type was found mostly in the unconsolidated deposits of the Lower Yakima subregion and in the basalt of the Walla Walla-Tucannon subregion. It probably represents a mixing of calcium bicarbonate water from shallow unconsolidated deposits and sodium bicarbonate water from underlying basalts.

Ground-water samples in which bicarbonate was not the predominant anion usually contained a mixture of anions, but sometimes sulfate predominated. This usually occurred in areas where land use is generally agricultural, such as the Yakima and the Walla-Walla River valleys, or industrial, such as the Hanford subregion. These activities could be the source of non-bicarbonate water types, but local deposits of sulfate such as pyrite and gypsum are more likely the contributors.

Hardness

Hardness is related to the ability of soaps to produce a lather in water; soft water reacts with soaps to produce an abundant lather with no residue, and hard water produces less lather and leaves a soapy residue. Hardness is caused primarily by the presence of calcium and magnesium in water; however, iron, manganese, and strontium also may contribute to water hardness. Hard water also may leave a scale deposit in boilers and hot water tanks that reduces their efficiency and causes clogging. The degree of water hardness can severely restrict its utility for domestic, municipal, and industrial purposes.

Hardness is expressed in terms of equivalent amounts of calcium carbonate. The fraction equivalent to carbonate and bicarbonate is referred to as carbonate hardness, and any excess is noncarbonate hardness. The following table shows the number of wells in each category of the hardness classification scheme proposed by the U.S. Environmental Protection Agency (1977b) by aquifer type:

Hardness as $CaCO_3$, in milligrams per liter	Description	Number of wells Unconsolidated[1]	Basalt
0-75	Soft	8	18
76-150	Moderately hard	31	23
151-300	Hard	24	16
More than 300	Very hard	7	6

[1]One sample in the Hanford subregion was not analyzed for hardness.

Ground water in the southeastern-south central region was generally moderately hard or hard. The only major exceptions were in the Lower Yakima and the Horse Heaven Hills subregions, where several wells with soft water were found. For the most part, these wells were finished in basalt and contained sodium bicarbonate water.

Sodium-Adsorption Ratio

A high level of sodium in water can cause serious irrigation problems. Sodium enters into ion-exchange reactions with calcium and magnesium and builds up in the soil, causing swelling and crusting of the soil, reduced permeability, and the loss of infiltration capacity. The soil becomes difficult to cultivate and irrigate without prior conditioning with substances such as gypsum or lime. The degree of sodium adsorption is determined by the ratio of sodium to calcium plus magnesium in the soil. This ratio is called the sodium-adsorption ratio (SAR), and indicates the degree to which sodium will be adsorbed by a soil when the water is brought into equilibrium with it. The ratio is defined by Hem (1978) as

$$SAR = \frac{(Na^{+})}{\sqrt{\frac{(Ca^{++}) + (Mg^{++})}{2}}} ,$$

where ion concentrations are expressed as milliequivalents per liter.

Values of SAR are often used in conjunction with specific conductance to evaluate the suitability of irrigation water. SAR (S) is plotted against specific conductance (C) on a standard diagram of irrigation categories (fig. 2). Water is classified according to the degree of salinity and sodium hazard assigned to the section of the diagram it falls in (U.S. Department of Agriculture, 1954). For example, water from well 7/27E-29Q01, with a specific-conductance value of 1,140 micromhos per centimeter and an SAR of 0.9, is in the high salinity-low sodium (C3-S1) category. In the southeastern-south central region, the primary irrigation hazard was salinity rather than sodium. Water from more than 100 well samples indicated at least a medium salinity hazard (C2, C3, or C4). Only five wells had water indicating any sodium hazard (S2, S3, or S4). A more detailed explanation of these irrigation categories and their relationship to soils can be found in "Diagnosis and Improvement of Saline and Alkali Soils" (U.S. Department of Agriculture, 1954).

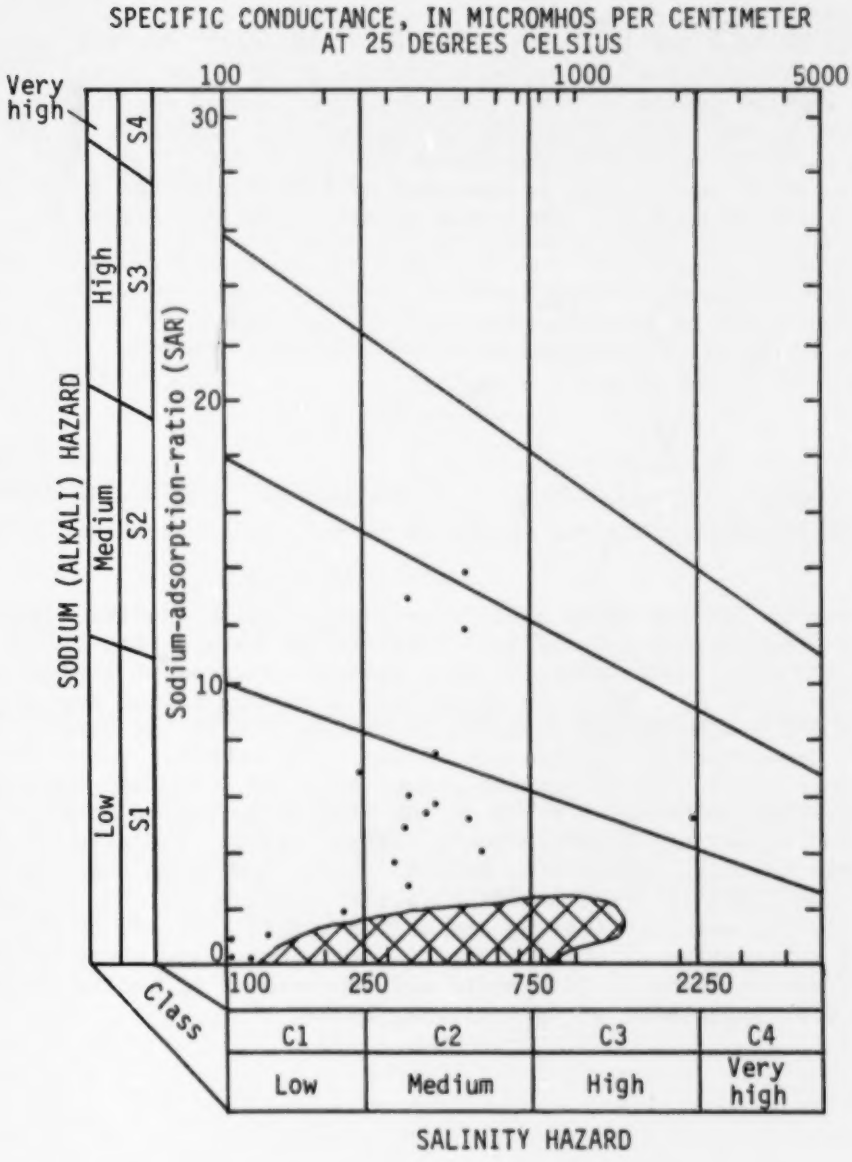


FIGURE 2.--Irrigation category of sites sampled. (From U.S. Department of Agriculture, 1954.)

Dissolved Solids

Dissolved solids are the minerals in solution in a water. When a portion of the water is evaporated to dryness, the residues are considered to be dissolved solids. Dissolved-solids concentrations are primarily indicators of the total mineral content of a water, but also may be related to problems such as excessive hardness, corrosive characteristics, or other mineral contaminations.

Dissolved-solids concentrations may be determined either gravimetrically or by calculation. In the gravimetric method, a known volume of water is evaporated and the residue weighed. The calculated value is the sum of all major chemical constituents that contribute to dissolved solids. Results from the two methods are expressed as milligrams per liter and are comparable. The dissolved-solids concentrations of the samples from wells in this study were calculated and are shown graphically on plate 2.

Dissolved-solids concentrations were generally at or less than 250 mg/L in the Upper Yakima, Klickitat, Palouse, and Blue Mountains subregions. Concentrations ranging from 250 to 500 mg/L, and in some cases exceeding 500 mg/L, were found in the Lower Yakima, Hanford, Horse Heaven Hills, and Walla Walla-Tucannon subregions. The high dissolved-solids concentrations in all of the subregions except Hanford occurred primarily in highly irrigated agricultural areas. The Hanford subregion has no agricultural activity, but industrial activity related to nuclear energy may affect dissolved-solids concentrations in that subregion.

Iron, Manganese, and Trace Metals

All samples except those from the Hanford subregion were analyzed for dissolved iron and manganese concentrations. Water samples from approximately 20 percent of the wells were analyzed for concentrations of dissolved trace metals, including aluminum, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc. Wells with water having excessive iron and manganese concentrations and wells that were sampled for trace metals are shown on plate 3.

Iron concentrations were less than 10 ug/L in approximately half of the water samples analyzed; however, concentrations up to, and in some instances exceeding, 100 ug/L occurred in most of the subregions. All of the subregions except the Palouse had median iron concentrations less than 20 ug/L. Waters in the Palouse subregion contained substantially more iron, with a median concentration of 200 ug/L and three samples with concentrations that exceeded 300 ug/L.

Manganese concentrations were also less than 10 ug/L in half of the water samples analyzed. Concentrations exceeding 50 ug/L were found primarily in the Lower Yakima, Horse Heaven Hills and Palouse subregions. All of the subregions had median manganese concentrations less than 10 ug/L except the Palouse subregion, which had a median concentration of 45 ug/L. As was the case in the 1981 study of the Puget Sound region, high concentrations of iron and manganese often occurred together.

Arsenic, cadmium, chromium, lead, silver, and mercury concentrations never exceeded 10 ug/L. Selenium concentrations were less than 10 ug/L in all samples except those from well 8/22E-12N01, which had a concentration of 18 ug/L. The only aluminum concentration exceeding 10 ug/L was a value of 20 ug/L in water from well 7/11E-35G01. Copper concentrations of up to 46 ug/L were common throughout the region. Zinc and barium concentrations approaching and sometimes exceeding 100 ug/L also were found throughout the region.

Excessive copper, lead, and zinc concentrations can be misleading in ground-water analyses. Many plumbing materials contain these elements and contamination may occur even if the lines are thoroughly flushed before sampling. In this cases, the results may not reflect true aquifer conditions.

Nitrate

All ground-water samples were analyzed for concentrations of dissolved nitrite-plus-nitrate. Because the concentration of nitrite is generally negligible in comparison to nitrate, nitrite-plus-nitrate is assumed to be equivalent to nitrate, and is referred to simply as nitrate in this report. Nitrate-concentration ranges for water in the wells sampled are shown on the map on plate 4.

Nitrate is found naturally in soils as part of the nitrogen cycle. However, high nitrate concentrations in ground water are usually associated with agricultural activities, landfills, and septic tanks. Waste products often leach into shallow aquifers, causing increases in the nitrate concentration. In some cases, vertical leakage into deeper aquifers may affect them as well.

Concentrations of dissolved nitrate in the southeastern-south central region differed greatly. Water in about half the wells sampled had nitrate concentrations less than 1.0 mg/L, expressed as nitrogen. Thresholds of 1.0 mg/L and 5.0 mg/L were chosen arbitrarily to indicate moderate and high nitrate concentrations, respectively. Both moderate and high concentrations were found in large areas of the Lower Yakima, Hanford, Horse Heaven Hills, and Walla Walla-Tucannon subregions. Land-use practices indicate that these elevated concentrations are probably a result of agricultural activities in the Lower Yakima, Horse Heaven Hills, and Walla Walla-Tucannon subregions and industrial wastes in the Hanford subregion. In the Walla Walla-Tucannon subregion, nitrate concentrations were substantially higher in unconsolidated wells than in basalt wells, indicating seepage from surface sources. Most of the other subregions had localized areas of high nitrate concentrations, which may be a result of any of the reasons discussed in this section.

Fecal-Coliform Bacteria

Fecal-coliform bacteria inhabit the intestines and feces of warmblooded animals. Their presence in water is an indicator of contamination by human or animal excrement. Because feces are a source of pathogenic bacteria and viruses, the presence of fecal-coliform bacteria in a water supply can indicate a potential health problem and the need for immediate remedial action. Contamination by fecal-coliform bacteria generally occurs by percolation of water from a contaminated source into the aquifer. Shallow wells are particularly susceptible. In some instances, the contamination may occur from taps and storage tanks. When this happens the samples do not represent true aquifer conditions.

Concentrations of fecal-coliform bacteria were determined in all wells except those in the Hanford subregion. Fecal-coliform bacteria concentrations are based on a 100-mL (milliliter) sample of water. Each bacterium in the sample results in a colony (or count) when incubated on selective media. The results are expressed in colonies per 100 mL, and samples in which bacteria are detected are referred to as having "positive" counts. If no bacteria are detected in a 100-mL sample, it cannot be assumed that the water is totally free from bacteria. Therefore, a zero count is expressed as less than one (<1). None of the 114 samples collected in the southeast-south central region exhibited any fecal-coliform bacteria counts.

Constituents Exceeding Drinking Water Regulations

In the southeastern-south central region a few constituents were present in concentrations exceeding drinking water regulations. The primary regulation for fluoride was exceeded in four samples, from wells 5/26E-05NO2, 5/28E-06RO1, 6/34E-07RO1, and 7/32E-07MO1). All four wells are in basalt and contain sodium bicarbonate water. Excessive fluoride concentrations are known to occur to some degree in deeper basalt aquifers of eastern Washington (VanDenburgh and Santos, 1965). The secondary drinking water regulation for sulfate was exceeded in one sample from well 10/22E-15CO1. Dissolved-solids concentrations exceeding drinking water regulations were found in water samples from 11 wells, all in the irrigated areas of the subregions previously mentioned as having moderate or high dissolved solids.

The pH values of six water samples were above 8.5. Five samples were sodium bicarbonate type water from basalt wells and one was calcium sulfate type water (categorized as "mixed or unusual") from a well in unconsolidated deposits.

Over the entire region, only 4 percent of the samples exceeded the drinking water regulation limits for iron and 15 percent exceeded the manganese limits. Excessive iron concentrations were found in the Lower Yakima and Palouse subregions. Excessive manganese concentrations were found in most of the subregions. In the Palouse subregion, 37 percent of the samples exceeded the drinking water regulation limit for iron and 25 percent exceeded the limit for manganese.

All trace-metal concentrations were well below applicable drinking water regulations, except for a single selenium concentration of 18 ug/L in water from well 8/22E-12NO1. Nitrate concentrations exceeded the primary drinking water regulation in six wells, all located in agricultural areas.

HISTORICAL (PRE-1982) GROUND-WATER QUALITY DATA

Selection of Data

Sites where ground-water samples were collected and analyzed prior to 1982 are designated on plate 5. Data from previous Geological Survey studies, studies by other agencies done cooperatively with the Survey, and miscellaneous Survey samplings are included. Only sites with complete cation and anion data are shown on the map. Because many sites have partial data (for example, hardness and alkalinity only), a method was needed to select only sites with complete data. Most "complete" analyses included an analysis for sulfate; thus, sulfate was used as the selection criterion. Additionally, all sites with metal analyses are shown. Only one point is plotted in a section, but the number of sites with available data in a section is indicated. All these data, which were obtained through the Survey's computerized storage and retrieval system (WATSTORE), are included in tables 2 and 3. Statistical summaries of the historical data are shown in table 1. These summaries are based on one data point from each site. If more than one analysis was present from a site, the average value of all analyses of a particular constituent was used to avoid weighting sites with multiple analyses over those with single analyses.

Because only complete analyses were used, data from some specific studies have been omitted from this study. The only area in the region where this is of any consequence is in the lower Yakima and Klickitat subregions. Fretwell (1979), in a study of the Yakima Indian Reservation, analyzed samples from about 450 wells for concentrations of nitrate and fecal-coliform bacteria. He concluded that nitrate concentrations are higher in the shallow aquifers of the Toppenish and Satus Creek basins than in the rest of the reservation. Fecal-coliform bacteria contamination was not considered a problem.

Problems in Using Historical Data

Problems often arise in the interpretation of historical data and in the comparison of 1982 data with historical data. Temporal fluctuations, and changes in analytical techniques and methodology can affect data comparability.

Temporal fluctuations can affect certain constituents in several ways. In recharge areas, seasonal weather patterns can affect the water quality in shallow aquifers. Water quality in wells that are pumped seasonally (especially in agricultural areas) can vary over the course of a year. Changes in land use, such as irrigation or construction, can alter the flow pattern and quality of recharge water. These seasonal and daily variations can affect evaluations of temporal differences and long-term trends in water-quality data.

Different conventions of analyzing and reporting nitrate concentrations cause difficulties with interpreting and comparing the data. Concentrations of nitrate have been expressed as both nitrate and nitrogen. Concentrations as nitrate can be converted to concentrations as nitrogen by simply multiplying the concentration as nitrate by 0.2258. Nitrate data also have been analyzed as nitrate or as nitrite-plus-nitrate. As mentioned before, there is little or no nitrite in most ground waters and analyses of nitrate and nitrite-plus-nitrate may be considered equivalent. Dissolved and total nitrate data also may be considered equivalent because most of the nitrate in ground-water samples is dissolved.

Comparisons of analytical results for some total and dissolved metals can also present a problem. Generally, in ground water the concentrations of the total and dissolved phases are approximately equivalent due to a lack of suspended material. However, in some instances, metals complexed with suspended or colloidal materials are removed when a sample is filtered for a dissolved analysis. For these cases, the dissolved-metal concentrations are substantially lower than the total metal concentrations and may not be considered equivalent.

Analytical detection limits have also improved with time. Generally, if a concentration is lower than the analytical detection limit for the given constituent, it is reported as less than the detection limit. In the past, detection limits for some constituents were orders of magnitude higher than at present. This may result in historical data that are not comparable to 1982 data. An example is dissolved lead. Much of the historical data were reported as less than 100 ug/L (<100 ug/L), but 1982 data are reported as less than 1 ug/L (<1 ug/L). The historical data reported as less than 100 ug/L cannot be easily compared to any 1982 data because the true values are not known in terms of current detection limits. This example is complicated further by the fact that in the primary drinking water regulations the maximum concentration for lead is 50 ug/L. All historical data analyzed and reported as less than 100 ug/L could exceed the current maximum permissible concentration, but this is difficult to assess.

Discussion of Historical Data

Historically, ground water sampled in the southeastern-south central region was soft or moderately hard, and calcium bicarbonate was the predominant water type. Sodium concentrations were high in some samples, to the point that sodium bicarbonate water was present to some degree throughout most of the region. Iron and manganese concentrations were generally quite low, but concentrations of both occasionally exceeded drinking water regulations throughout the region. Manganese and iron concentrations were exceptionally high in two springs in the Klickitat subregion, reaching values of 760 and 23,000 ug/L, respectively. A few chromium concentrations in the Hanford subregion exceeded drinking water regulations, but no other consistent trace-metal problems were evident.

Nitrate concentrations were, for the most part, below the drinking water regulation of 10.0 mg/L. Using the same criteria for historical data as for the 1982 data (1.0 mg/L for moderate nitrate concentrations, 5.0 mg/L for high nitrate concentrations), areas of moderate and high nitrate concentrations were found in the Hanford, Walla Walla-Tucannon, and lower Yakima subregions. Most of the high nitrate concentrations were also in these areas.

There are not enough historical data to draw any conclusions about fecal-coliform bacteria.

Generally, the historical and 1982 data lead to similar qualitative conclusions for ground water in the southeastern-south central region, with a few exceptions. The historical ground-water data indicated lower dissolved-solids concentrations and somewhat softer water than the 1982 data in most of the subregions, but the differences were large only in the Lower Yakima, Klickitat, and Walla Walla-Tucannon subregions. Some trace-metal concentrations are higher in the historical data, specifically chromium in the Hanford subregion. The other constituent characteristics in the historical data are similar to those in the 1982 data.

Quantitative comparisons of raw data and statistical summaries (table 1) should be used cautiously. The general problems in comparing historical and 1982 data have been discussed, but there are some statistical differences in these sets of data. Some subregions have a greater amount of historic data covering a larger period of time (30 years or more). Generally, the historical data were not sampled randomly, either temporally or spatially. All of these factors can affect quantitative conclusions drawn from the data. For these reasons, degrees of long-term change are difficult to establish and will not be discussed.

SUMMARY

The ground water of most of the southeastern-south central region was moderately hard, and calcium and bicarbonate were the predominant dissolved chemical constituents. Dissolved-solids concentrations were generally less than 500 mg/L. In the Lower Yakima, Horse Heaven Hills, and Walla Walla-Tucannon subregions, sodium was present to a greater degree, and in many cases was the dominant cation. This was especially true of wells finished in basalt. Increased SAR, pH, and fluoride concentrations were also found in those three subregions. Although some of these variations are due to natural causes, land use suggests that human activities, especially heavy irrigation, have had considerable effect.

Iron and manganese concentrations were generally less than 10 ug/L. Much higher concentrations were present in the Palouse subregion, where median concentrations of iron and manganese were 200 ug/L and 45 ug/L, respectively. Excessive trace-metal concentrations were not observed.

Nitrate concentrations were less than 1.0 mg/L in half of the samples. Large areas of the Lower Yakima, Walla Walla-Tucannon, and Hanford subregions exceeded 5.0 mg/L. No fecal-coliform bacteria were detected.

Only a few constituents exceeded drinking water regulation limits. High concentrations of dissolved solids and nitrate were the most common, but were limited primarily to agricultural or industrial areas. Excessive pH and fluoride concentrations were also observed in samples from some basalt wells in the Lower Yakima, Hanford, Horse-Heaven Hills, and Walla Walla-Tucannon subregions. Few water samples had iron and manganese concentrations that exceeded drinking water regulations except those from the Palouse subregion, where a large percentage of high concentrations was found.

The historical data suggest similar conclusions about overall ground-water quality in southeastern-south central Washington, with a few exceptions: historical water samples were slightly lower in dissolved-solids concentrations, were somewhat softer and some trace-metal concentrations were higher in the Hanford subregion. These differences, and other more quantitative comparisons, must be used cautiously, however, because of statistical differences between the historical and 1982 data.

SELECTED REFERENCES

Ebbert, J. C., 1984, The quality of ground water in the principal aquifers of northeastern-north central Washington: U.S. Geological Survey Water-Resources Investigations Report 83-4102, 112 p.

Ebbert, J. C., and Payne, K. L., 1985, The quality of water in the principal aquifers of southwestern Washington: U.S. Geological Survey Water-Resources Investigations Report 84-4093, 59 p.

Eddy, P. A., Prater, L. S., and Rieger, J. T., 1983, Ground-water surveillance at the Hanford site for CY 1982: Battelle Memorial Institute Pacific Northwest Laboratory publication PNL-4659, 39 p.

Foxworthy, B. L., 1962, Geology and ground-water resources of the Ahtanum Valley, Yakima County, Washington: U.S. Geological Survey Water-Supply Paper 1598, 100 p., 3 pls.

-----1979, Summary of the Nation's ground-water resources - Pacific Northwest Region: U.S. Geological Survey Professional Paper 813-5, 39 p.

Foxworthy, B. L., and Washburn, R. L., 1963, Ground water in the Pullman area, Whitman County, Washington: U.S. Geological Survey Water-Supply Paper 1655, 71 p., 3 pls.

Fretwell, M. O., 1979, Quality of surface and ground waters, Yakima Indian Reservation, Washington: U.S. Geological Survey Open-File Report 77-128, 177 p., 2 pls.

Hem, J. D., 1978, Study and interpretation of the chemical characteristics of natural water: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Huntting, M. T., Bennett, W. A. G., Livingston, V. E., Jr., and Moen, W. S., 1961, Geologic map of Washington: Washington State Department of Conservation, 1 sheet.

Lum, W. E., II, and Turney, G. L., 1983, Fluoride, nitrate, and dissolved-solids concentrations in ground waters of Washington: U.S. Geological Survey Water-Resources Investigations Open-File Report 82-508, 4 pls.

Molenaar, Dee, Grimstad, Peter, and Walters, K. L., 1980, Principal aquifers and well yields in Washington: U.S. Geological Survey Geohydrologic Monograph 5, scale 1:500,000, 1 sheet.

Newcomb, R. C., 1965, Geology and ground-water resources of the Walla Walla River basin, Washington-Oregon: Washington State Department of Conservation, Division of Water Resources, Water-Supply Bulletin 21, 151 p., 4 pls.

Phillips, E. L., 1960, Climate of Washington: U.S. Department of Commerce, Weather Bureau, Climatography of the United States, no. 60-45, reprinted April 1965, 27 p.

Swanson, D. A., and Wright, T. L., 1978, Bedrock geology in the northern Columbia Plateau and adjacent areas, in Baker, V. R., and Nummedal, Dag, eds., The Channeled Scabland: A guide to the geomorphology of the Columbia Basin, Washington: Comparative Planetary Geology Field Conference, June 5-8, National Aeronautics and Space Administration, 1978; Office of Space Science, Chapter 3, p. 37-57.

Turney, G. L., 1986, Quality of ground water in the Puget Sound Region, Washington, 1981: U.S. Geological Survey Water-Resources Investigations Report 84-4258, 170 p.

U.S. Department of Agriculture, 1954, Diagnosis and improvement of saline and alkali soils: Agriculture Handbook no. 60, 158 p.

U.S. Environmental Protection Agency, 1976, National interim primary drinking water regulations: U.S. Government Printing Office, 159 p.

-----1977a, National secondary drinking water regulations: Federal Register, v. 42, no. 62, Thursday, Mar. 31, 1977, part 1, p. 17143-17147.

-----1977b, Quality criteria for water, 1976: U.S. Government Printing Office, 256 p.

U.S. Geological Survey, 1977, National handbook of recommended methods for water-data acquisition: Office of Water-Data Coordination.

VanDenburgh, A. S., and Santos, J. F., 1965, Ground water in Washington, its chemical and physical quality: Washington State Pollution Control Commission Water-Supply Bulletin 24, 93 p.

Walters, K. L., and Glancy, P. A., 1969, Reconnaissance of geology and of ground-water occurrence in Whitman County, Washington: Washington State Department of Water Resources Water-Supply Bulletin 26, 169 p.

TABLES 1 THROUGH 4

TABLE 1.--Summary of ground-water quality data, by subregion

[Differences between statistics and data (table 2) are due to rounding in the statistical program and averaging of multiple values for sites (see pg. 21)]

Upper Yakima subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	350	(249)	71	(41)	219	(195)	10	(11)
pH (units)	8.1	(8.6)	6.5	(6.6)	7.0	(7.7)	10	(11)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	10	(0)
Hardness (as $CaCO_3$)	144	(119)	30	(15)	93	(62)	10	(11)
Noncarbonate hardness (as $CaCO_3$)	54	(0)	0	(0)	0	(0)	10	(11)
Calcium, dissolved	27	(28)	8.7	(5.2)	22	(18)	10	(11)
Magnesium, dissolved	21	(12)	2.1	(.1)	9.1	(6.4)	10	(11)
Sodium, dissolved	16	(43)	1.6	(1.9)	8.7	(9.4)	10	(11)
Sodium adsorption ratio	1.0	(5.0)	.1	(.2)	.4	(.5)	10	(11)
Potassium, dissolved	3.2	(2.6)	.4	(.2)	1.7	(2.0)	10	(11)
Alkalinity, total (as $CaCO_3$)	146	(130)	34	(21)	92	(97)	10	(11)
Sulfate, dissolved	13	(4.8)	<5	(.0)	<5	(2.6)	10	(11)
Chloride, dissolved	8.2	(14)	.7	(.4)	1.8	(2.0)	10	(11)
Fluoride, dissolved	.3	(.6)	<.1	(.0)	.1	(.2)	10	(11)
Silica, dissolved (as SiO_2)	56	(58)	9.8	(11)	35	(37)	10	(11)
Dissolved solids (residue at 180°C)	--	(171)	--	(30)	--	(143)	0	(9)
Dissolved solids, calculated (sum of constituents)	211	(159)	51	(32)	150	(143)	10	(11)
Nitrate (as N)	16	(.34)	<.10	(.00)	.61	(.07)	10	(11)
Iron, total recoverable (ug/L)	--	(740)	--	(<10)	--	(50)	0	(11)
Iron, dissolved (ug/L)	60	(--)	<3	(--)	8	(--)	10	(0)
Manganese, total recoverable (ug/L)	--	(170)	--	(<10)	--	(75)	0	(6)
Manganese, dissolved (ug/L)	23	(--)	<1	(--)	<1	(--)	10	(0)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Lower Yakima subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	1175	(1370)	110	(53)	435	(284)	45	(148)
pH (units)	8.9	(9.4)	6.9	(6.1)	7.6	(7.6)	45	(87)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	45	(0)
Hardness (as $CaCO_3$)	514	(554)	11	(8)	160	(102)	45	(152)
Noncarbonate hardness (as $CaCO_3$)	193	(411)	0	(0)	0	(0)	45	(150)
Calcium, dissolved	140	(150)	3.8	(2.4)	41	(23)	45	(151)
Magnesium, dissolved	57	(72)	.4	(.4)	15	(10)	45	(151)
Sodium, dissolved	86	(160)	6.3	(2.5)	32	(19)	45	(151)
Sodium adsorption ratio	7.1	(18)	.4	(.2)	1.0	(.7)	45	(151)
Potassium, dissolved	14	(17)	.7	(.4)	5.0	(4.0)	45	(152)
Alkalinity, total (as $CaCO_3$)	374	(533)	56	(24)	167	(129)	45	(150)
Sulfate, dissolved	260	(512)	<5.0	(.0)	19	(7.9)	45	(152)
Chloride, dissolved	52	(101)	1.0	(.0)	11	(4.5)	45	(152)
Fluoride, dissolved	1.7	(4.4)	.1	(.0)	.4	(.3)	45	(148)
Silica, dissolved (as SiO_2)	74	(78)	32	(10)	51	(49)	45	(89)
Dissolved solids (residue at 180°C)	--	(1020)	--	(39)	--	(203)	0	(80)
Dissolved solids, calculated (sum of constituents)	775	(922)	109	(40)	308	(199)	45	(89)
Nitrate (as N)	22	(58)	<.10	(.00)	1.8	(.34)	45	(151)
Iron, total recoverable (ug/L)	--	(6300)	--	(<10)	--	(60)	0	(72)
Iron, dissolved (ug/L)	510	(10,000)	<3	(20)	4	(80)	45	(89)
Manganese, total recoverable (ug/L)	--	(260)	--	(<5)	--	(50)	0	(35)
Manganese, dissolved (ug/L)	440	(3200)	<1	(<5)	2	(20)	45	(85)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Lower Yakima Subregion
(unconsolidated and basalt wells, 1982 data only)

[Values in milligrams per liter unless otherwise indicated;
data from basalt wells are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	1175	(1010)	110	(240)	358	(592)	29	(16)
pH (units)	8.1	(8.9)	6.9	(7.3)	7.5	(7.8)	29	(16)
Bacteria, fecal-coliform (cols./100 mL)	<1	(<1)	<1	(<1)	<1	(<1)	29	(16)
Hardness (as $CaCO_3$)	514	(408)	32	(11)	140	(220)	29	(16)
Noncarbonate hardness (as $CaCO_3$)	193	(135)	0	(0)	0	(4)	29	(16)
Calcium, dissolved	140	(86)	9.6	(3.8)	33	(46)	29	(16)
Magnesium, dissolved	57	(47)	1.9	(.4)	14	(24)	29	(16)
Sodium, dissolved	82	(86)	6.3	(16)	25	(38)	29	(16)
Sodium adsorption ratio	2.1	(7.1)	.4	(.4)	.9	(1.2)	29	(16)
Potassium, dissolved	8.8	(14)	.7	(3.2)	3.8	(6.9)	29	(16)
Alkalinity, total (as $CaCO_3$)	374	(369)	56	(128)	158	(198)	29	(16)
Sulfate, dissolved	260	(180)	<5.0	(<5.0)	19	(54)	29	(16)
Chloride, dissolved	52	(47)	1.0	(5.0)	8.4	(16)	29	(16)
Fluoride, dissolved	.9	(1.7)	.1	(.3)	.3	(.6)	29	(16)
Silica, dissolved (as SiO_2)	73	(74)	32	(40)	46	(57)	29	(16)
Dissolved solids (residue at 180°C)	--	(--)	--	(--)	--	(--)	0	(0)
Dissolved solids, calculated (sum of constituents)	775	(709)	109	(200)	227	(384)	29	(16)
Nitrate (as N)	6.1	(22)	<.10	(<.10)	1.8	(2.6)	29	(16)
Iron, total recoverable (ug/L)	--	(--)	--	(--)	--	(--)	0	(0)
Iron, dissolved (ug/L)	510	(390)	<3	(<3)	4	(9)	29	(16)
Manganese, total recoverable (ug/L)	--	(--)	--	(--)	--	(--)	0	(0)
Manganese, dissolved (ug/L)	440	(120)	<1	(<1)	1	(2)	29	(16)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Hanford subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	775	(3500)	214	(182)	409	(350)	20	(116)
pH (units)	8.8	(10.7)	7.5	(7.3)	7.9	(7.9)	20	(116)
Bacteria, fecal-coliform (cols./100 mL)	--	(--)	--	(--)	--	(--)	0	(0)
Hardness (as $CaCO_3$)	314	(350)	93	(9)	160	(134)	19	(116)
Noncarbonate hardness (as $CaCO_3$)	164	(224)	0	(0)	20	(14)	19	(116)
Calcium, dissolved	91	(92)	24	(2.8)	43	(38)	19	(116)
Magnesium, dissolved	21	(29)	7.2	(.4)	11	(10)	19	(116)
Sodium, dissolved	48	(700)	4	(2.9)	20	(20)	19	(116)
Sodium adsorption ratio	1.4	(31)	.2	(.1)	.7	(.8)	19	(116)
Potassium, dissolved	13	(13)	2.6	(1.3)	5.5	(5.7)	19	(116)
Alkalinity, total (as $CaCO_3$)	200	(258)	40	(34)	120	(119)	20	(116)
Sulfate, dissolved	230	(175)	15	(1.0)	44	(34)	20	(116)
Chloride, dissolved	30	(60)	1.3	(1.5)	10	(8.4)	20	(116)
Fluoride, dissolved	.6	(10)	.1	(.1)	.3	(.4)	20	(116)
Silica, dissolved (as SiO_2)	43	(68)	16	(4.3)	36	(36)	19	(116)
Dissolved solids (residue at 180°C)	542	(2700)	129	(121)	279	(225)	20	(107)
Dissolved solids, calculated (sum of constituents)	515	(1084)	133	(110)	259	(233)	19	(116)
Nitrate (as N)	8.3	(380)	.28	(.00)	3.8	(2.4)	20	(116)
Iron, total recoverable (ug/L)	--	(3400)	--	(<10)	--	(70)	0	(17)
Iron, dissolved (ug/L)	--	(3900)	--	(<10)	--	(30)	0	(50)
Manganese, total recoverable (ug/L)	--	(250)	--	(<1)	--	(12)	0	(11)
Manganese, dissolved (ug/L)	--	(110)	--	(<2)	--	(10)	0	(35)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Klickitat subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	375	(1800)	253	(20)--	--	(82)	2	(36)
pH (units)	7.5	(7.9)	7.3	(6.4)	--	(7.5)	2	(5)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	--	(--)	2	(0)
Hardness (as $CaCO_3$)	185	(753)	119	(8)	--	(29)	2	(36)
Noncarbonate hardness (as $CaCO_3$)	0	(22)	0	(0)	--	(0)	2	(36)
Calcium, dissolved	33	(120)	23	(2.1)	--	(7.2)	2	(36)
Magnesium, dissolved	25	(110)	15	(.4)	--	(3.0)	2	(36)
Sodium, dissolved	9.8	(160)	7.1	(.8)	--	(3.9)	2	(36)
Sodium adsorption ratio	.3	(16)	.3	(.1)	--	(.3)	2	(36)
Potassium, dissolved	4.6	(16)	3.1	(.6)	--	(1.9)	2	(36)
Alkalinity, total (as $CaCO_3$)	212	(928)	135	(8)	--	(39)	2	(36)
Sulfate, dissolved	5.0	(4.5)	<5.0	(.0)	--	(1.1)	2	(36)
Chloride, dissolved	2.6	(150)	1.7	(.2)	--	(1.0)	2	(36)
Fluoride, dissolved	.2	(1.1)	<.1	(<.1)	--	(.1)	2	(36)
Silica, dissolved (as SiO_2)	58	(121)	56	(36)	--	(58)	2	(6)
Dissolved solids (residue at 180°C)	--	(964)	--	(140)	--	180	0	(5)
Dissolved solids, calculated (sum of constituents)	264	(953)	194	(75)	--	(144)	2	(6)
Nitrate (as N)	.76	(2.2)	.23	(.00)	--	(.10)	2	(26)
Iron, total recoverable (ug/L)	--	(11,000)	--	(100)	--	(1700)	0	(5)
Iron, dissolved (ug/L)	17	23,000	17	(<10)	--	(110)	2	(31)
Manganese, total recoverable (ug/L)	--	(200)	--	(<20)	--	(60)	0	(4)
Manganese, dissolved (ug/L)	3	(760)	3	(<10)	--	(<10)	2	(31)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Horse Heaven Hills subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	1140	(1090)	152	(183)	398	(376)	22	(18)
pH (units)	8.8	(8.9)	7.1	(7.2)	7.8	(7.9)	22	(18)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	22	(0)
Hardness (as $CaCO_3$)	518	(420)	7	(7)	82	(57)	22	(20)
Noncarbonate hardness (as $CaCO_3$)	358	(97)	0	(0)	0	(0)	22	(20)
Calcium, dissolved	120	(69)	2.3	(2.4)	19	(14)	22	(20)
Magnesium, dissolved	79	(60)	.3	(.2)	8.2	(5.2)	22	(20)
Sodium, dissolved	100	(98)	7.6	(7.8)	48	(64)	22	(20)
Sodium adsorption ratio	14	(16)	.4	(.3)	1.6	(3.8)	22	(20)
Potassium, dissolved	18	(26)	1.1	(1.1)	7.8	(10)	22	(20)
Alkalinity, total (as $CaCO_3$)	578	(323)	61	(91)	170	(161)	22	(20)
Sulfate, dissolved	250	(170)	5.0	(0)	20	(9.2)	22	(20)
Chloride, dissolved	120	(43)	1.2	(2.4)	11	(11)	22	(20)
Fluoride, dissolved	2.0	(2.4)	.1	(.1)	.4	(1.0)	22	(18)
Silica, dissolved (as SiO_2)	79	(68)	40	(47)	57	(56)	22	(20)
Dissolved solids (residue at 180°C)	--	(718)	--	(155)	--	(264)	0	(18)
Dissolved solids, calculated (sum of constituents)	741	(692)	148	(155)	296	(254)	22	(20)
Nitrate (as N)	33	(14)	<.10	(.00)	.20	(.09)	22	(20)
Iron, total recoverable (ug/L)	--	(730)	--	(<10)	--	(30)	0	(17)
Iron, dissolved (ug/L)	290	(20)	5	(10)	14	(10)	22	(3)
Manganese, total recoverable (ug/L)	--	(40)	--	(<20)	--	(<20)	0	(7)
Manganese, dissolved (ug/L)	160	(20)	<1	(0)	5	(1)	22	(4)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Walla Walla-Tucannon subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	2200	(853)	192	(127)	350	(236)	23	(44)
pH (units)	8.8	(9.0)	6.6	(7.0)	7.4	(8.0)	23	(37)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	23	(0)
Hardness (as $CaCO_3$)	659	(234)	36	(6)	139	(78)	23	(44)
Noncarbonate hardness (as $CaCO_3$)	44	(32)	0	(0)	0	(0)	23	(44)
Calcium, dissolved	160	(55)	11	(2.1)	35	(19)	23	(44)
Magnesium, dissolved	63	(24)	2.1	(.2)	12	(7.5)	23	(44)
Sodium, dissolved	310	(135)	6.2	(5.4)	27	(19)	23	(37)
Sodium adsorption ratio	5.4	(13)	.3	(.3)	1.0	(.7)	23	(37)
Potassium, dissolved	14	(16)	2.4	(.7)	5.7	(5.0)	23	(39)
Alkalinity, total (as $CaCO_3$)	996	(422)	70	(59)	144	(114)	23	(44)
Sulfate, dissolved	69	(42)	6.0	(2.2)	13	(5.0)	23	(44)
Chloride, dissolved	140	(46)	1.7	(.6)	16	(3.4)	23	(44)
Fluoride, dissolved	2.4	(3.9)	.1	(.2)	.4	(.5)	23	(44)
Silica, dissolved (as SiO_2)	98	(91)	38	(34)	53	(52)	23	(44)
Dissolved solids (residue at 180°C)	--	(555)	--	(114)	--	(186)	0	(37)
Dissolved solids, calculated (sum of constituents)	1408	(542)	148	(114)	267	(189)	23	(37)
Nitrate (as N)	14	(3.5)	<.10	(.00)	1.8	(.08)	23	(44)
Iron, total recoverable (ug/L)	--	(1490)	--	(<10)	--	(40)	0	(37)
Iron, dissolved (ug/L)	130	(10)	<3	(10)	9	(--)	23	(1)
Manganese, total recoverable (ug/L)	--	(150)	--	(0)	0	(<20)	0	(15)
Manganese, dissolved (ug/L)	83	(--)	<1	(--)	5	(--)	23	(0)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Walla Walla-Tucannon subregion
(unconsolidated and basalt wells, 1982 data only)

[Values in milligrams per liter unless otherwise indicated; data from basalt wells are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	2200	(525)	192	(192)	500	(304)	11	(12)
pH (units)	7.7	(8.8)	6.6	(7.0)	7.4	(7.8)	11	(12)
Bacteria, fecal-coliform (cols./100 mL)	<1	(<1)	<1	(<1)	<1	(<1)	11	(12)
Hardness (as $CaCO_3$)	659	(183)	80	(36)	180	(89)	11	(12)
Noncarbonate hardness (as $CaCO_3$)	44	(16)	0	(0)	0	(0)	11	(12)
Calcium, dissolved	160	(50)	19	(11)	44	(25)	11	(12)
Magnesium, dissolved	63	(14)	7.8	(2.1)	17	(7.6)	11	(12)
Sodium, dissolved	310	(81)	6.4	(6.2)	29	(20)	11	(12)
Sodium adsorption ratio	5.4	(4.0)	.3	(.3)	1.0	(1.0)	11	(12)
Potassium, dissolved	14	(12)	2.7	(2.4)	6.2	(5.4)	11	(12)
Alkalinity, total (as $CaCO_3$)	996	(171)	70	(98)	170	(121)	11	(12)
Sulfate, dissolved	69	(38)	7	(6)	29	(10)	11	(12)
Chloride, dissolved	140	(72)	2.2	(1.7)	17	(7.1)	11	(12)
Fluoride, dissolved	.7	(2.4)	.1	(.2)	.3	(.5)	11	(12)
Silica, dissolved (as SiO_2)	54	(98)	38	(49)	47	(59)	11	(12)
Dissolved solids (residue at 180°C)	--	(--)	--	(--)	--	(--)	0	(0)
Dissolved solids, calculated (sum of constituents)	1408	(423)	148	(163)	313	(230)	11	(12)
Nitrate (as N)	14	(4.8)	.47	(<.10)	3.3	(.72)	11	(12)
Iron, total recoverable (ug/L)	--	(--)	--	(--)	--	(--)	0	(0)
Iron, dissolved (ug/L)	110	(130)	<3	(<3)	13	(8)	11	(12)
Manganese, total recoverable (ug/L)	--	(--)	--	(--)	--	(--)	0	(0)
Manganese, dissolved (ug/L)	83	(70)	<1	(<1)	3	(6)	11	(12)

TABLE 1.--Summary of ground-water quality data, by subregion--continued

Palouse subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	392	(597)	222	(267)	292	(318)	8	(20)
pH (units)	7.7	(8.5)	6.9	(6.9)	7.4	(7.8)	8	(20)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	8	(0)
Hardness (as $CaCO_3$)	157	(244)	96	(98)	118	(116)	8	(22)
Noncarbonate hardness (as $CaCO_3$)	5	(106)	0	(0)	0	(0)	8	(22)
Calcium, dissolved	36	(58)	24	(21)	26	(24)	8	(22)
Magnesium, dissolved	20	(24)	7.6	8.6)	14	(14)	8	(22)
Sodium, dissolved	24	(32)	10	(9.9)	16	(22)	8	(16)
Sodium adsorption ratio	1.2	(1.2)	.4	(.4)	.6	(.9)	8	(16)
Potassium, dissolved	4.5	(5.6)	1.6	(1.9)	3.0	(4.0)	8	(16)
Alkalinity, total (as $CaCO_3$)	170	(207)	107	(122)	148	(161)	8	(22)
Sulfate, dissolved	53	(48)	6.0	(.8)	7.5	(7.0)	8	(22)
Chloride, dissolved	4.9	(29)	.9	(1.8)	2.6	(4.0)	8	(22)
Fluoride, dissolved	.4	(.9)	.2	(.2)	.4	(.4)	8	(15)
Silica, dissolved (as SiO_2)	63	(69)	47	(26)	58	(54)	8	(16)
Dissolved solids (residue at 180°C)	--	(276)	--	(184)	--	(230)	0	(13)
Dissolved solids, calculated (sum of constituents)	290	(279)	176	(176)	221	(233)	8	(16)
Nitrate (as N)	2.0	(5.1)	<.10	(.02)	.10	(.45)	8	(15)
Iron, total recoverable (ug/L)	--	(530)	--	(10)	--	(200)	0	(22)
Iron, dissolved (ug/L)	1900	(--)	<3	(--)	200	(--)	8	(0)
Manganese, total recoverable (ug/L)	--	(80)	--	(<20)	--	(40)	0	(8)
Manganese, dissolved (ug/L)	200	(--)	1	(--)	45	(--)	8	(--)

TABLE 1.--Summary of ground-water quality data, by subregion

Blue Mountain subregion

[Values in milligrams per liter unless otherwise indicated; historic data are in parentheses]

Constituent	Maximum		Minimum		Median		Number of sample sites	
Specific conductance (micromhos)	335	(303)	200	(204)	248	(248)	4	(5)
pH (units)	7.7	(8.4)	7.5	(8.1)	7.7	(8.2)	4	(5)
Bacteria, fecal-coliform (cols./100 mL)	<1	(--)	<1	(--)	<1	(--)	4	(0)
Hardness (as $CaCO_3$)	128	(117)	56	(17)	86	(55)	4	(5)
Noncarbonate hardness (as $CaCO_3$)	0	(0)	0	(0)	0	(0)	4	(5)
Calcium, dissolved	33	(22)	18	(6.5)	21	(16)	4	(5)
Magnesium, dissolved	13	(15)	2.1	(.2)	7.4	(3.7)	4	(5)
Sodium, dissolved	32	(49)	12	(10)	18	(17)	4	(5)
Sodium adsorption ratio	1.9	(4.7)	.5	(.5)	.8	(1.0)	4	(5)
Potassium, dissolved	11	(11)	3.1	(2.7)	8.8	(8.7)	4	(5)
Alkalinity, total (as $CaCO_3$)	134	(132)	92	(89)	115	(107)	4	(5)
Sulfate, dissolved	25	(28)	7.0	(5.2)	10	(8.9)	4	(5)
Chloride, dissolved	16	(12)	2.1	(.8)	9.2	(5.9)	4	(5)
Fluoride, dissolved	.7	(1.1)	.2	(.1)	.3	(.4)	4	(5)
Silica, dissolved (as SiO_2)	68	(66)	28	(30)	62	(60)	4	(5)
Dissolved solids (residue at 180°C)	--	(200)	--	(136)	--	(188)	0	(4)
Dissolved solids, calculated (sum of constituents)	256	(243)	176	(142)	202	(201)	4	(5)
Nitrate (as N)	1.7	(.07)	<.10	(.00)	.48	(.04)	4	(5)
Iron, total recoverable (ug/L)	--	(180)	--	(10)	--	(40)	0	(5)
Iron, dissolved (ug/L)	9	(--)	3	(--)	6	(--)	4	(0)
Manganese, total recoverable (ug/L)	--	(110)	--	(<20)	--	(65)	--	(2)
Manganese, dissolved (ug/L)	18	(--)	<1	(--)	8	(--)	4	(0)

TABLE 2.--Ground-water quality data--major ions, field measurements, and concentrations of iron, manganese, nitrate, and bacteria, by subregion

EXPLANATION OF GEOLOGIC UNITS

Geologic unit codes used in this table indicate that wells are open to one or more of the following formations.

Geologic Unit Code		Formation
Basalt units:		
110	BSLT	Quaternary Basalt
122	SDLM	Saddle Mountains Basalt
122	YKIM	Saddle Mountains and Wanapum Basalts
122	WWPM	Wanapum Basalt
121, 122	CBRV	Wanapum and Grande Ronde Basalts
122	GDRD	Gronde Ronde Basalt
Unconsolidated units:		
110	ALVM	Alluvium
112	GLCV	Glaciofluvial Deposits
112	SCBD	Scabland Flood Deposits
121, 122	ELBG	Ellensburg Formation
124	RSLN	Roslyn Formation

TABLE 2.--Continued

UPPER YAKIMA

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
16/19E-28C01	46 51 31	120 27 27	01	--	78-03-02	1019	1425.00	195	8.5	26.8
17/18E-01C01	46 59 59	120 31 48	01	--	57-03-14	1208	--	197	7.4	12.0
17/18E-04R01	46 59 46	120 35 12	01	112GLCV	82-06-08	150	1570.00	190	6.8	12.5
17/18E-11E01	46 58 39	120 33 24	01	112GLCV	82-06-07	750	1490.00	175	8.0	16.0
17/19E-05M01	46 59 20	120 29 30	01	112GLCV	82-06-08	69	1585.00	248	6.8	11.7
17/19E-11G01	46 58 54	120 25 08	01	--	62-11-02	200	--	207	7.5	11.1
17/19E-11M01	46 58 41	120 25 57	01	112GLCV	82-06-08	145	1590.00	304	7.0	--
18/18E-25D01	47 01 41	120 32 04	01	--	70-12-03	730	--	213	7.7	13.0
18/18E-26F01	47 01 24	120 33 04	01	112GLCV	82-06-07	132	1650.00	282	6.9	12.0
18/18E-28C01	47 01 37	120 35 42	01	112GLCV	82-06-07	57	1570.00	249	7.0	11.1
18/19E-32D01	47 00 42	120 37 20	01	--	62-11-02	455	--	172	8.2	14.4
19/15E-28N01S	47 06 17	120 51 20	01	--	62-09-05	--	--	124	7.4	11.1
20/13E-11C01	47 14 45	121 11 15	01	112GLCV	82-06-07	65	2190.00	71	6.5	7.1
20/14E-10A03	47 14 52	121 04 14	01	112GLCV	82-06-07	167	2240.00	118	7.8	9.2
20/14E-11A01	47 14 43	121 03 04	01	--	68-10-07	200	--	249	8.3	8.9
20/14E-27J02	47 11 40	121 04 25	01	112GLCV	82-06-07	290	2075.00	188	8.1	9.2
20/15E-34N01	47 10 36	120 57 42	01	124RSLN	82-06-07	198	1960.00	350	6.7	9.9
21/14E-28J01	47 16 45	121 05 05	01	--	68-04-25	220	--	187	7.8	--
21/17E-17R01	47 18 18	120 43 39	01	--	65-08-15	75	--	179	7.7	10.0
21/17E-22P01	47 17 26	120 41 50	01	--	62-09-12	50	--	211	8.6	7.8
22/13E-32C01	47 21 31	121 14 42	01	--	65-07-28	70	--	41	6.6	4.5

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
16/19E-28C01	78-03-02	--	56	0	14	5.2	22	45	1.3	2.6
17/18E-01C01	57-03-14	--	83	0	18	9.2	8.6	18	.4	2.0
17/18E-04R01	82-06-08	<1	86	0	21	8.2	5.3	11	.3	2.9
17/18E-11E01	82-06-07	<1	54	0	15	3.9	16	38	1.0	3.2
17/19E-05M01	82-06-08	<1	104	0	22	12	11	18	.5	1.4
17/19E-11G01	62-11-02	--	84	0	19	8.9	9.9	20	.5	2.3
17/19E-11M01	82-06-08	<1	121	0	27	13	14	20	.6	3.1
18/18E-25D01	70-12-03	--	86	0	18	10	9.4	19	.5	2.2
18/18E-26F01	82-06-07	<1	120	0	25	14	8.8	14	.4	2.0
18/18E-28C01	82-06-07	<1	96	0	22	10	14	24	.6	2.0
18/19E-32D01	62-11-02	--	57	0	15	4.7	14	34	.8	2.0
19/15E-28N01S	62-09-05	--	56	0	12	6.4	4.2	13	.3	2.3
20/13E-11C01	82-06-07	<1	30	0	8.7	2.1	2.2	13	.2	.4
20/14E-10A03	82-06-07	<1	59	0	10	8.2	1.4	6	.1	.4
20/14E-11A01	68-10-07	--	119	0	28	12	4.4	7	.2	1.4
20/14E-27J02	82-06-07	<1	90	0	26	6.2	3.9	8	.2	.8
20/15E-34N01	82-06-07	<1	144	54	23	21	8.6	11	.3	1.1
21/14E-28J01	68-04-25	--	82	0	20	7.7	8.2	18	.4	.7
21/17E-17R01	65-08-15	--	62	0	22	1.6	15	34	.9	.6
21/17E-22P01	62-09-12	--	15	0	6.0	.1	43	86	5.0	.2
22/13E-32C01	65-07-28	--	17	0	5.2	1.0	1.9	19	.2	.2

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
16/19E-28C01	78-03-02	120	--	0	--	98	--	1.9	3.3	.6
17/18E-01C01	57-03-14	120	--	0	--	98	--	1.3	2.0	.2
17/18E-04B01	82-06-08	--	112	--	.0	--	91	<5.0	2.0	.1
17/18E-11E01	82-06-07	--	108	--	.0	--	88	<5.0	1.7	.2
17/19E-05M01	82-06-08	--	161	--	.0	--	129	<5.0	1.5	.2
17/19E-11G01	62-11-02	118	--	0	--	97	--	3.2	4.2	.2
17/19E-11M01	82-06-08	--	164	--	.0	--	128	9.0	8.1	.3
18/18E-25D01	70-12-03	125	--	0	--	103	--	2.6	2.3	.2
18/18E-26F01	82-06-07	--	178	--	.0	--	146	<5.0	2.1	.2
18/18E-28C01	82-06-07	--	149	--	.0	--	122	<5.0	3.8	.1
18/18E-32D01	62-11-02	101	--	0	--	83	--	3.0	2.0	.3
19/16E-28N01S	62-09-05	92	--	0	--	67	--	2.6	1.0	.2
20/13E-11C01	82-06-07	--	39	--	.0	--	34	<5.0	1.5	<.1
20/14E-10A03	82-06-07	--	70	--	.0	--	61	<5.0	.7	.1
20/14E-11A01	69-10-07	150	--	4	--	130	--	4.8	.4	.1
20/14E-27J02	82-06-07	--	114	--	.0	--	94	<5.0	1.2	.1
20/15E-34N01	82-06-07	--	108	--	.0	--	90	13	8.2	.1
21/14E-28J01	68-04-25	121	--	0	--	99	--	.0	1.0	.2
21/17E-17P01	65-08-15	108	--	0	--	89	--	3.2	1.0	.2
21/17E-22P01	62-09-12	97	--	4	--	86	--	3.0	14	.4
22/13E-32C01	65-07-28	25	--	0	--	21	--	.2	.5	.0

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
16/19E-28C01	78-03-02	48	150	157	--	<.10	--
17/18E-01C01	57-03-14	58	151	158	.80	--	--
17/18E-04B01	82-06-08	39	--	143	--	--	1.2
17/18E-11E01	82-06-07	45	--	144	--	--	.24
17/19E-05M01	82-06-08	51	--	183	--	--	.43
17/19E-11G01	62-11-02	46	--	152	1.5	--	--
17/19E-11M01	82-06-08	56	--	211	--	--	2.6
19/18E-25D01	70-12-03	53	171	159	1.3	--	--
18/18E-26F01	82-06-07	48	--	196	--	--	.79
18/18E-28C01	82-06-07	31	--	167	--	--	1.4
18/18E-32D01	62-11-02	39	--	130	.60	--	--
19/16E-28N01S	62-09-05	37	114	106	.30	--	--
20/13E-11C01	82-06-07	9.8	--	51	--	--	<.10
20/14E-10A03	82-06-07	22	--	85	--	--	.13
20/14E-11A01	69-10-07	25	159	158	.00	--	--
20/14E-27J02	82-06-07	12	--	112	--	--	<.10
20/15E-34N01	82-06-07	29	--	157	--	--	16
21/14E-28J01	68-04-25	20	108	117	.10	--	--
21/17E-17P01	65-08-15	18	117	115	.10	--	--
21/17E-22P01	62-09-12	20	143	143	.00	--	--
22/13E-32C01	65-07-28	11	30	32	.10	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
16/19E-28C01	78-03-02	30	--	<10	--
17/18E-01C01	57-03-14	740	--	--	--
17/19E-04R01	82-06-08	--	36	--	23
17/18E-11E01	82-06-07	--	7	--	<1
17/19E-05M01	82-06-08	--	9	--	<1
17/19E-11G01	62-11-02	<10	--	--	--
17/19E-11M01	82-06-08	--	19	--	1
18/18E-25D01	70-12-03	600	--	<20	--
18/18E-26F01	82-06-07	--	55	--	6
18/18E-28C01	82-06-07	--	<3	--	<1
18/18E-32D01	62-11-02	10	--	--	--
19/16E-28N01S	62-09-05	40	--	--	--
20/13E-11C01	82-06-07	--	<3	--	<1
20/14E-10A03	82-06-07	--	<3	--	<1
20/14E-11A01	69-10-07	20	--	120	--
20/14E-27J02	82-06-07	--	60	--	11
20/15E-34N01	82-06-07	--	<3	--	<1
21/14E-29J01	68-04-25	340	--	170	--
21/17E-17R01	65-08-15	470	--	100	--
21/17E-22P01	62-09-12	50	--	--	--
22/13E-32C01	65-07-28	240	--	<50	--

TABLE 2.--Continued

LOWER YAKIMA

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
07/17E-07M01	46 06 14	120 44 20	01	--	76-08-25	--	3200.99	144	--	10.0
07/19E-11G01S	46 06 35	120 23 36	01	121YKIM	74-11-06	--	2515.00	365	--	11.0
07/19E-25N01S	46 03 24	120 23 03	01	121YKIM	74-11-06	--	3039.99	115	--	9.6
08/19E-13G01S	46 10 54	120 22 17	01	121YKIM	74-11-06	--	1720.00	420	--	14.2
08/21E-01G01	46 12 40	120 07 38	01	121ELRG	74-05-22	130	770.00	900	--	15.8
08/22E-03K01	46 12 26	120 02 32	01	122SOLM	82-07-12	189	768.00	740	7.9	17.2
08/22E-04P01	46 12 54	120 03 44	01	121ELRG	73-10-08	103	730.00	906	8.0	16.3
08/22E-09A01	46 11 52	120 03 38	01	121ELRG	73-10-05	82	750.00	1080	7.8	15.8
08/22E-12N01	46 11 09	120 00 24	01	122YKIM	82-06-10	500	775.00	675	7.7	16.7
08/24E-01J01	46 12 23	119 45 06	01	122WNPM	82-06-11	1264	734.00	412	8.3	21.8
08/24E-02J01	46 12 26	119 45 20	01	--	59-10-30	760	--	326	7.7	19.0
				--	62-12-11	760	--	387	7.5	17.8
				--	70-10-09	760	--	380	7.4	18.0
08/24E-02K01	46 12 27	119 46 21	01	--	59-10-30	599	--	388	7.5	17.0
				--	62-12-11	599	--	366	7.6	17.2
08/24E-02Q01	46 12 14	119 45 30	01	--	61-05-11	744	--	336	7.8	15.5
				--	62-12-11	744	--	376	7.8	16.7
				--	70-09-28	744	--	429	--	16.8
08/29E-06J01	46 12 36	119 21 21	01	--	71-09-23	332	700.00	487	7.6	17.9
08/29E-17G02	46 10 40	119 12 30	01	122SOLM	82-06-25	245	770.00	820	7.9	18.3
08/29E-22A01	46 10 13	119 09 27	01	--	70-11-17	802	--	1240	7.3	23.0
08/30E-07H02	46 11 30	119 06 07	01	112GLCV	82-06-24	66	375.00	730	7.5	17.3
08/30E-17D02	46 10 56	119 05 32	01	112GLCV	82-06-25	61	400.00	605	7.4	18.6
08/30E-19M01	46 09 32	119 06 42	01	122YKIM	82-06-24	330	570.00	550	7.6	18.6
08/30E-22N01	46 09 26	119 03 07	01	112GLCV	82-06-24	30	360.00	570	7.5	--
08/30E-24N02	46 09 21	119 00 32	01	--	59-10-30	41	--	238	7.9	12.0
09/19E-20L01	46 15 03	120 28 13	01	121YKIM	73-06-20	698	1317.00	326	7.7	17.6
09/21E-08L02	46 16 51	120 13 16	01	110ALVM	73-10-04	42	720.00	362	7.6	13.4
09/21E-17C01	46 16 20	120 13 24	01	122ELRG	82-06-11	83	762.00	208	7.2	15.1
09/21E-24Q03	46 14 42	120 07 52	01	110ALVM	73-10-02	89	680.00	710	8.1	14.4
09/21E-27L01	46 14 14	120 10 43	01	121ELRG	74-05-22	119	720.00	370	--	15.8
09/21E-35H01	46 13 34	120 08 51	01	121ELRG	80-02-12	--	--	--	--	--
09/21E-35H03	46 13 30	120 08 54	01	121ELRG	80-02-12	--	--	--	--	--
				121ELRG	80-02-12	--	--	--	--	--
				121ELRG	80-02-12	--	--	--	--	--
				121ELRG	80-02-12	--	--	--	--	--
				121ELRG	80-02-13	--	--	--	--	--
09/22E-07N01	46 16 40	120 07 29	01	--	74-05-22	--	865.00	495	--	12.6
09/22E-18P01	46 16 35	120 02 27	01	112GLCV	82-06-10	95	695.00	310	7.7	16.0
09/22E-12H01	46 16 53	119 59 54	01	--	61-05-05	100	--	425	7.9	16.0

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
07/17E-07M01	76-08-25	--	77	0	18	7.9	7.9	18	.4	1.3
07/19E-11G01S	74-11-06	--	145	0	35	14	20	23	.7	2.4
07/19E-25N01S	74-11-06	--	43	0	10	4.3	5.3	21	.4	1.5
08/19E-13G01S	74-11-06	--	175	0	42	17	22	21	.7	2.4
08/21E-01G01	74-05-22	--	419	243	110	35	30	13	.7	4.4
08/22E-03K01	82-07-12	<1	263	96	64	25	38	24	1.1	3.2
08/22E-04R01	73-10-08	--	398	263	100	36	32	15	.7	6.2
08/22E-09A01	73-10-05	--	481	381	120	44	30	12	.6	1.5
08/22E-12N01	82-06-10	<1	282	135	70	26	27	17	.7	5.5
08/24E-01J01	82-06-11	<1	39	0	11	2.9	77	75	5.5	14
08/24E-02J01	59-10-30	--	56	0	14	5.1	43	57	2.6	12
	62-12-11	--	88	0	24	6.8	48	50	2.3	12
	70-10-09	--	65	0	16	6.2	55	60	3.1	11
08/24E-02K01	59-10-30	--	68	0	17	6.1	54	59	3.0	9.8
	62-12-11	--	66	0	17	5.7	54	60	3.0	11
08/24E-02Q01	61-05-11	--	67	0	16	6.6	46	56	2.5	10
	62-12-11	--	82	0	20	7.7	48	52	2.4	11
	70-09-28	--	106	0	26	10	49	47	2.1	11
08/28E-06J01	71-09-23	--	170	35	40	17	27	25	.9	8.0
08/29E-17G02	82-06-25	<1	357	0	77	40	53	24	1.3	5.1
08/29E-22A01	70-11-17	--	554	403	103	72	58	18	1.1	17
08/30E-07H02	82-06-24	<1	304	28	87	21	45	24	1.2	7.6
08/30E-17D02	82-06-25	<1	262	0	77	17	35	22	1.0	7.1
08/30E-19H01	82-06-24	<1	197	48	41	23	39	29	1.2	12
08/30E-22N01	82-06-24	<1	196	0	52	16	50	35	1.6	4.8
08/30E-24N02	59-10-30	--	103	0	30	6.9	7.6	13	.3	4.1
09/19E-20L01	73-06-20	--	98	0	21	11	28	36	1.3	9.0
09/21E-08L02	73-10-04	--	100	0	22	11	43	48	1.9	2.5
09/21E-17C01	82-06-11	<1	95	1	24	8.6	8.5	16	.4	2.1
09/21E-24Q03	73-10-02	--	336	184	80	33	18	10	.4	5.4
09/21E-27L01	74-05-22	--	132	41	33	12	19	23	.7	4.1
09/21E-35H01	80-02-12	--	173	33	46	14	21	21	.7	2.6
09/21E-35H03	80-02-12	--	262	82	72	20	24	16	.7	3.6
	80-02-12	--	255	75	69	20	22	16	.6	3.6
	80-02-12	--	252	82	68	20	23	16	.7	3.6
	80-02-12	--	243	73	66	19	22	16	.6	3.7
	80-02-13	--	248	78	68	19	23	17	.7	3.6
09/22E-07N01	74-05-22	--	197	0	41	23	25	21	.8	3.1
09/22E-10R01	82-06-10	<1	113	0	29	9.9	19	26	.8	4.9
09/22E-12H01	61-05-05	--	178	22	48	14	17	17	.6	7.4

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
07/17E-07M01	76-08-25	112	--	--	--	92	--	1.9	.8	.1
07/19E-11G01S	74-11-06	130	--	--	--	156	--	13	11	.6
07/19E-25N01S	74-11-06	55	--	--	--	45	--	2.3	1.3	.1
08/19E-13G01S	74-11-06	226	--	--	--	185	--	17	9.0	.5
08/21E-01S01	74-05-22	215	--	--	--	176	--	130	46	.4
08/22E-03K01	82-07-12	--	198	--	.0	--	167	74	27	.9
08/22E-04R01	73-10-08	165	--	0	--	135	--	240	29	.6
08/22E-09A01	73-10-05	122	--	0	--	100	--	120	70	.8
08/22E-12N01	82-06-10	--	182	--	.0	--	147	120	21	.5
08/24E-01J01	82-06-11	--	250	--	.0	--	207	<5.0	9.4	1.2
08/24E-02J01	59-10-30	197	--	0	--	153	--	4.8	6.5	.6
	62-12-11	224	--	0	--	184	--	9.8	9.0	.6
	70-10-09	222	--	0	--	182	--	.0	9.1	.9
08/24E-02K01	59-10-30	221	--	0	--	181	--	.1	11	.9
	62-12-11	216	--	0	--	177	--	.8	9.5	.7
08/24E-02Q01	61-05-11	202	--	0	--	166	--	.6	9.5	.7
	62-12-11	221	--	0	--	181	--	2.4	9.2	.6
	70-09-28	255	--	0	--	209	--	3.8	8.5	.6
08/28E-06J01	71-09-23	164	--	0	--	135	--	65	15	.4
08/29E-17G02	82-06-25	--	481	--	.0	--	369	45	19	.6
08/29E-22A01	70-11-17	194	--	0	--	151	--	512	16	.4
08/30E-07H02	82-06-24	--	354	--	.0	--	276	47	29	.3
08/30E-17D02	82-06-25	--	346	--	.0	--	267	41	15	.4
08/30E-19M01	82-06-24	--	196	--	.0	--	149	94	21	.4
08/30E-22N01	82-06-24	--	273	--	.0	--	215	51	19	.7
08/30E-24N02	59-10-30	137	--	0	--	112	--	9.1	1.2	.2
09/19E-20L01	73-06-20	179	--	0	--	147	--	12	8.3	.8
09/21E-08L02	73-10-04	219	--	0	--	180	--	9.7	3.5	.3
09/21E-17C01	82-06-11	--	114	--	.0	--	94	13	7.0	.2
09/21E-24D03	73-10-02	195	--	0	--	152	--	150	45	.2
09/21E-27L01	74-05-22	111	--	--	--	91	--	29	13	.4
09/21E-35H01	80-02-12	--	--	--	--	140	--	48	10	--
09/21E-35H03	80-02-12	--	--	--	--	190	--	73	14	--
	80-02-12	--	--	--	--	190	--	71	13	--
	80-02-12	--	--	--	--	170	--	70	14	--
	80-02-12	--	--	--	--	170	--	69	14	--
	80-02-13	--	--	--	--	170	--	66	14	--
09/22E-07N01	74-05-22	247	--	--	--	203	--	28	16	.2
09/22E-10R01	82-04-10	--	180	--	.0	--	149	12	3.4	.5
09/22E-12H01	61-05-05	190	--	0	--	156	--	44	11	.4

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
07/17E-07M01	74-08-25	21	108	114	--	--	.08	--
07/19E-11G01S	74-11-06	--	--	--	--	--	1.0	--
07/19E-25N01S	74-11-06	--	--	--	--	--	1.1	--
08/19E-13G01S	74-11-06	--	--	--	--	--	1.2	--
08/21E-01G01	74-05-22	--	--	--	--	--	24	--
08/22E-03K01	82-07-12	61	--	390	--	--	--	22
08/22E-04R01	73-10-08	54	646	579	14	--	14	16
08/22E-09A01	73-10-05	62	798	509	54	--	54	58
08/22E-12N01	82-06-10	66	--	426	--	--	--	15
08/24E-01J01	82-06-11	62	--	308	--	--	--	.26
08/24E-02J01	59-10-30	59	229	237	--	.20	--	--
	62-12-11	50	273	270	--	.00	--	--
	70-10-09	47	246	255	--	.00	--	--
08/24E-02K01	59-10-30	50	248	258	--	.20	--	--
	62-12-11	51	261	256	--	.10	--	--
08/24E-02Q01	61-05-11	46	236	235	--	.10	--	--
	62-12-11	45	254	253	--	.10	--	--
	70-09-28	45	270	279	--	.00	--	--
08/28E-06J01	71-09-23	59	380	312	--	--	2.6	--
08/29E-17G02	82-06-25	50	--	546	--	--	--	1.8
08/29E-22A01	70-11-17	53	1020	922	--	.40	--	--
08/30E-07H02	82-06-24	39	--	470	--	--	--	4.8
08/30E-17D02	82-06-25	40	--	403	--	--	--	2.8
08/30E-19M01	82-06-24	50	--	377	--	--	--	5.0
08/30E-22N01	82-06-24	35	--	363	--	--	--	2.2
08/30E-24N02	59-10-30	25	159	151	--	.20	--	--
09/19E-20L01	73-06-20	50	202	228	.02	--	.02	<.10
09/21E-08L02	73-10-04	47	250	247	1.6	--	1.6	1.0
09/21E-17C01	82-06-11	44	--	163	--	--	--	.27
09/21E-24Q03	73-10-02	39	491	462	.95	--	.97	.65
09/21E-27L01	74-05-22	--	--	--	--	--	10	--
09/21E-35H01	80-02-12	--	--	--	--	--	7.8	--
09/21E-35H03	80-02-12	--	--	--	--	--	15	--
	80-02-12	--	--	--	--	--	14	--
	80-02-12	--	--	--	--	--	14	--
	80-02-12	--	--	--	--	--	14	--
	80-02-13	--	--	--	--	--	14	--
09/22E-07N01	74-05-22	--	--	--	--	--	<.10	--
09/22E-10R01	82-06-10	48	--	216	--	--	--	<.10
09/22E-12H01	61-05-05	57	315	292	--	2.3	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
07/17E-07M01	76-08-25	--	40	--	<10
07/19E-11G01S	74-11-06	--	50	--	<10
07/19E-25N01S	74-11-06	--	230	--	50
08/19E-13G01S	74-11-06	--	20	--	<10
08/21E-01G01	74-05-22	--	20	--	<10
08/22E-03K01	82-07-12	--	11	--	2
08/22E-04R01	73-10-08	--	70	--	<10
08/22E-09A01	73-10-05	--	260	--	<10
08/22E-12N01	82-06-10	--	7	--	2
08/24E-01J01	82-06-11	--	27	--	37
08/24E-02J01	59-10-30	50	--	--	--
	62-12-11	240	--	--	--
	70-10-09	50	--	80	--
08/24E-02K01	59-10-30	120	--	--	--
	62-12-11	70	--	--	--
08/24E-02Q01	61-05-11	60	--	--	--
	62-12-11	30	--	--	--
	70-09-28	50	--	80	--
08/28E-06J01	71-09-23	40	--	<20	--
08/29E-17G02	82-06-25	--	<3	--	<1
08/29E-22A01	70-11-17	27	--	200	--
08/30E-07H02	82-06-24	--	8	--	2
08/30E-17D02	82-06-25	--	4	--	1
08/30E-19M01	82-06-24	--	24	--	16
08/30E-22N01	82-06-24	--	30	--	3
08/30E-24N02	59-10-30	30	--	--	--
09/19E-20L01	73-06-20	--	--	--	--
09/21E-08L02	73-10-04	--	90	--	<10
09/21E-17C01	82-06-11	--	8	--	3
09/21E-24Q03	73-10-02	--	60	--	650
09/21E-27L01	74-05-22	--	20	--	--
09/21E-35H01	80-02-12	--	--	--	--
09/21E-35H03	80-02-12	--	--	--	--
	80-02-12	--	--	--	--
	80-02-12	--	--	--	--
	80-02-12	--	--	--	--
	80-02-13	--	--	--	--
09/22E-07N01	74-05-22	--	40	--	<10
09/22E-10R01	82-06-10	--	26	--	300
09/22E-12H01	61-05-05	10	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
09/22E-32M01	46 13 21	120 05 56	01	121ELRG	74-05-22	142	740.00	900	--	17.6
09/23E-23G01	46 15 08	119 54 07	01	--	70-10-07	1148	--	484	7.9	16.0
09/23E-25G01	46 14 13	119 52 55	01	122SOLM	82-06-10	118	820.00	550	7.7	13.8
09/24E-04H01	46 17 49	119 48 50	01	122SOLM	82-06-11	320	1190.00	661	7.6	17.2
09/25E-12A01	46 17 12	119 37 13	01	--	62-11-01	393	--	1140	7.6	16.1
09/27E-07D01	46 17 11	119 29 19	01	122SOLM	82-06-25	360	590.00	700	7.7	15.2
09/28E-04G01	46 17 39	119 19 49	01	122SOLM	82-06-24	314	365.00	382	7.8	17.5
09/28E-06A02	46 17 51	119 20 53	01	122SOLM	82-06-24	90	460.00	633	8.0	18.3
09/28E-16K01	46 15 35	119 19 50	01	--	62-11-01	58	--	627	7.9	16.1
09/28E-17A01	46 16 13	119 19 36	01	122YKIM	82-06-24	1105	565.00	505	8.2	26.3
09/28E-27K01	46 14 02	119 17 38	01	122YKIM	82-06-24	525	620.00	1010	7.3	19.1
10/16E-15M01	46 21 00	120 48 56	01	121YKIM	74-04-11	125	1290.00	247	--	13.0
10/16E-20E01D1	46 20 30	120 51 10	01	122GORD	71-02-09	425	1550.00	227	7.4	12.8
				122GORD	74-05-21	425	1550.00	240	--	12.0
10/17E-07P01	46 21 41	120 43 56	01	112GLCV	73-12-06	65	1030.00	171	--	10.8
				112GLCV	82-06-09	65	1030.00	152	7.1	12.3
10/17E-14D01	46 21 22	120 40 05	01	110ALVM	74-04-11	75	910.00	365	--	20.5
10/17E-17L01	46 21 07	120 43 26	01	121YKIM	74-11-05	537	1040.00	152	--	11.0
10/17E-23L01	46 20 09	120 39 49	01	121YKIM	74-06-13	700	985.00	373	--	20.3
10/17E-26B01	46 19 55	120 39 26	01	121ELRG	74-10-01	450	980.00	250	--	17.0
10/18E-02C01	46 23 23	120 32 04	01	110ALVM	73-11-28	39	818.00	378	--	9.7
10/18E-07K01	46 21 53	120 36 51	01	110ALVM	73-11-28	59	821.00	1370	--	13.8
10/18E-21D01	46 20 46	120 34 58	01	110ALVM	73-11-28	63	820.00	660	--	14.2
10/19E-31N01	46 18 21	120 37 35	01	122SOLM	74-05-20	1044	1138.00	330	--	23.8
10/19E-11P01	46 21 42	120 24 39	01	110ALVM	73-11-27	69	775.00	270	--	10.4
10/19E-17H01	46 21 14	120 27 34	01	110ALVM	74-03-06	75	783.00	285	--	13.0
10/19E-22B01	46 20 08	120 25 04	01	110ALVM	73-11-27	68	759.00	368	--	13.0
10/20E-02K01	46 22 47	120 16 55	01	110ALVM	73-11-08	40	745.00	305	--	15.2
10/20E-03M01	46 22 47	120 18 48	01	110ALVM	39-01-26	167	760.00	--	--	13.9
10/20E-03N02	46 22 34	120 18 36	01	--	39-01-26	160	--	--	--	14.0
10/20E-04L01	46 22 44	120 19 42	01	122ELRG	74-09-19	1025	760.00	212	--	22.6
				122ELRG	82-06-10	1025	760.00	200	7.9	24.9
10/20E-08C02	46 22 29	120 20 45	01	110ALVM	74-03-08	60	765.00	247	--	9.5
10/20E-09A01	46 22 26	120 18 56	01	121ELRG	59-10-19	863	757.00	171	7.8	20.5
				121ELRG	71-02-03	863	757.00	171	8.0	21.0
10/20E-19J01	46 20 05	120 21 25	01	112GLCV	82-06-10	60	743.00	360	7.4	15.3
10/20E-20K01	46 20 19	120 20 42	01	110ALVM	73-11-09	60	745.00	347	--	11.9
10/20E-24E01	46 20 22	120 16 02	01	110ALVM	73-11-09	16	720.00	550	--	12.8
10/20E-33L01	46 18 30	120 19 30	01	110ALVM	73-11-09	40	745.00	931	--	14.5
10/20E-36G02	46 18 47	120 15 38	01	110ALVM	73-11-09	50	718.00	342	--	14.2

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
09/22E-32M01	74-05-22	--	397	249	98	37	33	15	.7	4.9
09/23E-23G01	70-10-07	--	172	0	44	15	38	32	1.3	5.4
09/23E-25G01	82-06-10	<1	214	0	43	26	37	27	1.1	4.8
09/24E-04M01	82-06-11	<1	305	101	86	22	16	10	.4	5.0
09/25E-12A01	62-11-01	--	536	411	137	47	33	12	.6	7.0
09/27E-07D01	82-06-25	<1	298	9	73	28	35	20	.9	6.7
09/28E-06G01	82-06-24	<1	37	0	11	2.2	72	76	5.4	9.4
09/28E-06A02	82-06-24	<1	227	67	48	26	42	28	1.2	10
09/28E-16K01	62-11-01	--	264	0	58	29	34	21	.9	11
09/28E-17A01	82-06-24	<1	61	0	14	6.2	86	71	5.0	13
09/28E-27K01	82-06-24	<1	409	127	86	47	67	23	1.3	13
10/16E-15M01	74-04-11	--	108	0	22	13	8.5	14	.4	3.9
10/16E-20E01D1	71-02-09	--	98	0	21	11	7.8	14	.4	4.0
	74-05-21	--	104	0	22	12	7.9	14	.3	3.4
10/17E-07R01	73-12-06	--	67	0	14	7.9	6.7	17	.4	3.3
	82-06-09	<1	65	0	14	7.2	6.3	17	.4	3.1
10/17E-14D01	74-04-11	--	151	0	34	16	19	21	.7	4.8
10/17E-17L01	74-11-05	--	62	0	14	6.5	8.4	22	.5	2.5
10/17E-23L01	74-06-13	--	126	28	24	16	14	36	1.4	4.3
10/17E-26R01	74-10-01	--	93	0	22	9.2	11	20	.5	2.5
10/18E-02C01	73-11-28	--	158	2	40	14	18	19	.6	4.7
10/18E-07K01	73-11-28	--	423	0	95	45	160	45	3.5	5.2
10/18E-21D01	73-11-28	--	91	0	24	7.6	120	73	5.7	5.1
10/18E-31N01	74-05-20	--	105	0	19	14	31	38	1.3	5.1
10/19E-11P01	73-11-27	--	126	0	34	10	13	18	.5	3.0
10/19E-17H01	74-03-06	--	119	0	32	9.6	13	19	.5	3.6
10/19E-22P01	73-11-27	--	161	0	43	13	23	23	.8	3.9
10/20E-02K01	73-11-08	--	153	0	38	14	10	12	.4	2.5
10/20E-03M01	39-01-26	--	87	0	22	7.9	6.8	14	.3	1.9
10/20E-03M02	39-01-26	--	87	0	22	7.9	6.8	14	.3	1.9
10/20E-04L01	74-09-19	--	52	0	14	4.2	24	47	1.5	5.0
	82-06-10	<1	57	0	14	5.4	25	46	1.5	5.0
10/20E-08C02	74-03-08	--	114	19	30	9.6	8.0	13	.3	2.5
10/20E-09A01	59-10-19	--	42	0	13	2.2	19	47	1.3	4.1
	71-02-03	--	44	0	12	3.5	20	47	1.4	3.7
10/20E-19J01	82-06-10	<1	160	2	41	14	15	17	.5	3.7
10/20E-20K01	73-11-09	--	148	0	38	13	16	19	.6	3.6
10/20E-24F01	73-11-09	--	230	30	54	23	28	21	.8	4.4
10/20E-33L01	73-11-09	--	543	309	150	41	49	21	1.3	9.1
10/20E-36G02	73-11-09	--	142	0	32	15	19	22	.7	4.9

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
09/22E-32M01	74-05-22	141	--	--	--	148	--	130	45	.4
09/23E-23G01	70-10-07	232	--	0	--	190	--	50	13	.5
09/23E-25G01	82-06-10	--	313	--	.0	--	255	19	5.0	.8
09/24E-04H01	82-06-11	--	248	--	.0	--	204	79	22	.3
09/25E-12A01	62-11-01	153	--	0	--	125	--	308	101	.4
09/27E-07D01	82-06-25	--	371	--	.0	--	289	48	16	.7
09/29E-04G01	82-06-24	--	240	--	.0	--	192	5.0	8.1	1.5
09/29E-06A02	82-06-24	--	212	--	.0	--	160	140	15	.8
09/29E-16K01	62-11-01	324	--	0	--	266	--	56	14	.2
09/29E-17A01	82-06-24	--	260	--	.0	--	207	34	12	1.7
09/29E-27K01	82-06-24	--	354	--	.0	--	291	190	47	.3
10/16E-15W01	74-04-11	149	--	--	--	122	--	3.7	1.9	1.0
10/16E-20E01D1	71-02-09	142	--	0	--	116	--	3.0	.5	.1
	74-05-21	151	--	--	--	124	--	3.8	1.0	.1
10/17E-07R01	73-12-06	102	--	--	--	84	--	2.5	1.0	.1
	82-06-09	--	93	--	.0	--	78	<5.0	1.0	.1
10/17E-14D01	74-04-11	207	--	--	--	170	--	4.9	18	1.3
10/17E-17L01	74-11-05	101	--	--	--	83	--	2.6	2.2	.1
10/17E-23L01	74-06-13	119	--	--	--	98	--	1.3	4.3	.8
10/17E-26R01	74-10-01	124	--	--	--	102	--	13	4.4	.3
10/18E-02C01	73-11-28	190	--	--	--	156	--	17	5.9	.3
10/18E-07K01	73-11-28	650	--	--	--	533	--	140	69	.5
10/18E-21D01	73-11-28	389	--	--	--	319	--	7.3	3.0	1.4
10/18E-31N01	74-05-20	217	--	--	--	178	--	1.6	3.3	.7
10/19E-11P01	73-11-27	170	--	--	--	139	--	7.9	2.9	.1
10/19E-17H01	74-03-06	161	--	--	--	132	--	7.9	2.6	.1
10/19E-22R01	73-11-27	220	--	--	--	180	--	13	4.3	.2
10/20E-02K01	73-11-08	193	--	--	--	158	--	7.0	5.2	.1
10/20E-03H01	39-01-26	113	--	0	--	93	--	5.1	2.7	.0
10/20E-03H02	39-01-26	113	--	0	--	93	--	5.1	2.7	.0
10/20E-04L01	74-09-19	132	--	--	--	108	--	.7	2.6	.6
	82-06-10	--	135	--	.0	--	110	<5.0	2.7	.7
10/20E-08C02	74-03-08	116	--	--	--	95	--	9.2	3.6	<.1
10/20E-09A01	59-10-19	105	--	0	--	86	--	.3	1.0	.6
	71-02-03	107	--	0	--	88	--	.0	2.0	.5
10/20E-19J01	82-06-10	--	199	--	.0	--	158	13	5.6	.1
10/20E-20K01	73-11-09	191	--	--	--	148	--	15	5.7	.2
10/20E-24E01	73-11-09	244	--	--	--	200	--	43	19	.3
10/20E-33L01	73-11-09	285	--	--	--	234	--	280	28	.4
10/20E-36G02	73-11-09	222	--	--	--	182	--	6.4	3.8	.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
09/22E-32M01	74-05-22	--	--	--	--	--	28	--
09/23E-23G01	70-10-07	52	310	332	--	.30	--	--
09/23E-25G01	82-06-10	53	--	343	--	--	--	4.5
09/24E-04H01	82-06-11	51	--	403	--	--	--	7.6
09/25E-12A01	62-11-01	54	--	763	--	19	--	--
09/27E-07D01	82-06-25	55	--	445	--	--	--	3.4
09/28E-04G01	82-06-24	60	--	287	--	--	--	<.10
09/28E-06A02	82-06-24	55	--	441	--	--	--	<.10
09/28E-16K01	62-11-01	39	--	401	--	.00	--	--
09/28E-17A01	82-06-24	74	--	369	--	--	--	<.10
09/28E-27K01	82-06-24	73	--	677	--	--	--	8.2
10/16E-15M01	74-04-11	--	--	--	--	--	.74	--
10/16E-20E01D1	71-02-09	55	174	172	--	.40	--	--
	74-05-21	--	--	--	--	--	.26	--
10/17E-07R01	73-12-06	--	--	--	--	--	.28	--
	82-06-09	50	--	135	--	--	--	.36
10/17E-14D01	74-04-11	--	--	--	--	--	.73	--
10/17E-17L01	74-11-05	--	--	--	--	--	.02	--
10/17E-23L01	74-06-13	--	--	--	--	--	.01	--
10/17E-26B01	74-10-01	--	--	--	--	--	1.1	--
10/18E-02C01	73-11-28	--	--	--	--	--	4.1	--
10/18E-07K01	73-11-28	--	--	--	--	--	2.6	--
10/18E-21D01	73-11-28	--	--	--	--	--	2.0	--
10/18E-31N01	74-05-20	--	--	--	--	--	.01	--
10/19E-11P01	73-11-27	--	--	--	--	--	2.3	--
10/19E-17H01	74-03-06	--	--	--	--	--	2.2	--
10/19E-22R01	73-11-27	--	--	--	--	--	3.8	--
10/20E-02K01	73-11-08	--	--	--	--	--	.73	--
10/20E-03M01	39-01-26	32	136	134	--	--	.45	--
10/20E-03N02	39-01-26	32	136	134	--	2.0	--	--
10/20E-04L01	74-09-19	--	--	--	--	--	.01	--
	82-06-10	73	---	197	--	--	--	<.10
10/20E-08C02	74-03-08	--	--	--	--	--	3.1	--
10/20E-09A01	59-10-19	68	158	160	--	.20	.05	--
	71-02-03	68	161	162	--	.00	--	--
10/20E-19J01	82-06-10	34	--	224	--	--	--	4.7
10/20E-20K01	73-11-09	--	--	--	--	--	4.7	--
10/20E-24E01	73-11-09	--	--	--	--	--	4.3	--
10/20E-33L01	73-11-09	--	--	--	--	--	.13	--
10/20E-36G02	73-11-09	--	--	--	--	--	.04	--

TABLE 2.--Continued

LOCAL IDENT-I-FIED	DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
09/22E-32M01	74-05-22	--	30	--	<10
09/23E-23G01	70-10-07	30	--	<20	--
09/23E-25G01	82-06-10	--	<3	--	<1
09/24E-04H01	82-06-11	--	<3	--	<1
09/25E-12A01	62-11-01	50	--	--	--
09/27E-07D01	82-06-25	--	<3	--	<1
09/28E-04G01	82-06-24	--	62	--	41
09/28E-06A02	82-06-24	--	19	--	86
09/28E-16K01	62-11-01	270	--	--	--
09/28E-17A01	82-06-24	--	14	--	26
09/28E-27K01	82-06-24	--	<3	--	2
10/16E-15M01	74-04-11	--	80	--	110
10/16E-20E01D1	71-02-09	50	--	<20	--
	74-05-21	--	20	--	<10
10/17E-07R01	73-12-06	--	40	--	25
	82-06-09	--	<3	--	<1
10/17E-14D01	74-04-11	--	1500	--	360
10/17E-17L01	74-11-05	--	20	--	20
10/17E-23L01	74-06-13	--	400	--	30
10/17E-26R01	74-10-01	--	20	--	<10
10/18E-02C01	73-11-28	--	70	--	<10
10/18E-07K01	73-11-28	--	70	--	38
10/18E-21D01	73-11-28	--	460	--	13
10/18E-31N01	74-05-20	--	120	--	40
10/19E-11P01	73-11-27	--	430	--	13
10/19E-17H01	74-03-06	--	60	--	20
10/19E-22R01	73-11-27	--	50	--	25
10/20E-02K01	73-11-08	--	510	--	13
10/20E-03M01	39-01-26	--	50	--	--
10/20E-03N02	39-01-26	50	--	--	--
10/20E-04L01	74-09-19	--	60	--	130
	82-06-10	--	40	--	120
10/20E-08C02	74-03-05	--	70	--	50
10/20E-09A01	59-10-19	80	80	--	--
	71-02-03	50	--	100	--
10/20E-19J01	82-06-10	--	<3	--	1
10/20E-20K01	73-11-09	--	130	--	13
10/20E-24F01	73-11-09	--	80	--	25
10/20E-33L01	73-11-09	--	80	--	1900
10/20E-36G02	73-11-09	--	540	--	1500

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
10/21E-07K01	46 22 04	120 14 22	01	112GLCV	82-06-11	61	725.00	288	6.9	13.7
10/21E-19J02	46 20 17	120 13 54	01	--	60-07-13	9	--	328	7.2	--
10/21E-21H01	46 20 29	120 11 27	01	--	62-11-01	180	--	411	7.9	17.2
10/21E-33R01	46 19 59	120 11 48	01	110ALVM	74-05-23	41	701.00	360	--	21.0
10/21E-34L01	46 18 37	120 10 39	01	112GLCV	82-06-11	44	691.00	292	7.3	14.8
10/22E-15C01	46 21 30	120 03 02	01	112GLCV	82-06-10	185	855.00	1175	7.6	14.0
10/22E-25E01	46 19 30	120 01 07	01	--	70-12-01	461	--	305	7.7	19.0
				--	71-05-18	461	--	378	8.3	18.0
10/22E-25F02	46 19 37	120 00 35	01	122WNPM	70-10-06	1162	745.00	307	7.6	20.0
				122WNPM	70-12-01	1162	745.00	305	7.7	19.0
10/22E-36E01	46 18 42	120 01 00	01	122WNPM	82-06-10	1057	725.00	302	8.0	24.5
10/26E-11D01	46 17 22	119 31 50	01	--	59-03-24	420	1320.00	397	7.7	--
11/16E-17E01	46 26 37	120 51 20	01	121YKIM	74-11-04	142	1530.00	220	--	11.7
11/16E-20F01	46 25 46	120 51 01	01	110ALVM	74-04-10	85	1422.00	248	--	12.5
11/16E-25N01	46 24 17	120 46 12	01	110ALVM	74-04-10	72	1100.00	532	--	13.0
11/16E-34K02	46 23 40	120 48 14	01	122GDRD	74-06-14	457	1190.00	390	--	21.4
11/17E-01F01	46 28 11	120 38 22	01	121YKIM	74-06-13	1174	1040.00	237	--	24.2
11/17E-01Q01	46 27 46	120 37 57	01	121ELRG	74-11-05	190	983.00	260	--	11.4
11/17E-03L01	46 27 58	120 41 01	01	121YKIM	74-05-21	989	1122.00	280	--	25.2
11/17E-14F01	46 26 30	120 40 08	01	121YKIM	74-11-04	500	910.00	245	--	14.2
11/17E-24P01	46 25 10	120 38 20	01	121YKIM	74-11-04	800	844.00	255	--	11.7
11/17E-26R01	46 24 20	120 38 55	01	121YKIM	74-11-04	--	845.00	242	--	12.6
11/17E-32L02	46 23 39	120 43 23	01	122ELRG	82-06-09	177	942.00	250	7.4	12.4
11/17E-33A01	46 24 08	120 41 30	01	110ALVM	74-10-01	48	885.00	390	--	14.8
11/18E-01R01	46 28 38	120 30 41	01	110ALVM	73-11-29	42	905.00	378	--	11.8
11/18E-09N01	46 26 56	120 34 55	01	121ELRG	74-10-01	400	885.00	252	--	23.0
11/18E-17R01	46 26 52	120 35 37	01	121ELRG	74-11-04	625	880.00	260	--	17.7
11/18E-17D01	46 26 51	120 35 04	01	110ALVM	73-11-29	68	885.00	825	--	11.3
11/18E-26L01	46 24 42	120 32 14	01	110ALVM	74-03-06	52	835.00	293	--	26.4
11/18E-29P01	46 24 17	120 36 00	01	110ALVM	73-11-29	70	852.00	600	--	12.7
11/19E-30H01	46 24 48	120 36 23	01	121ELRG	74-11-04	544	855.00	250	--	12.8
11/19E-02L02	46 27 58	120 24 38	01	110ALVM	73-11-28	43	841.00	183	--	11.8
11/19E-10D01	46 27 03	120 25 24	01	122ELRG	74-09-26	765	860.00	115	--	18.4
				122ELRG	82-06-09	765	860.00	110	8.1	18.7
11/19E-27H01	46 24 50	120 25 06	01	112GLCV	82-06-09	35	822.00	202	7.0	14.7
11/19E-30J01	46 24 37	120 28 48	01	110ALVM	73-11-29	32	835.00	270	--	12.8
11/19E-35G01	46 24 02	120 24 20	01	110ALVM	74-03-05	61	812.00	260	--	13.6
11/19E-35N01	46 23 27	120 24 43	01	110ALVM	62-11-02	100	802.00	283	7.2	19.9
11/20E-02H01	46 28 10	120 16 28	01	122SDLM	82-06-10	575	1270.00	240	8.9	23.7
11/20E-22R01	46 25 18	120 17 44	01	122ELRG	82-06-10	528	840.00	130	8.0	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
10/21E-07K01	82-06-11	<1	129	0	32	12	15	20	.6	2.9
10/21E-19J02	60-07-13	--	149	--	33	16	12	15	.4	3.3
10/21E-21H01	62-11-01	--	116	0	32	8.8	43	43	1.8	7.7
10/21E-33B01	74-05-23	--	131	0	31	13	25	29	1.0	3.9
10/21E-34L01	82-06-11	<1	135	0	31	14	11	15	.4	3.5
10/22E-15C01	82-06-10	<1	514	193	140	40	57	19	1.1	4.5
10/22E-25E01	70-12-01	--	113	0	29	9.8	16	22	.7	6.7
	71-05-18	--	144	0	36	13	21	23	.8	5.6
10/22E-25F02	70-10-06	--	112	0	29	9.7	16	22	.7	7.4
	70-12-01	--	113	0	29	9.8	16	22	.7	6.7
10/22E-36E01	82-06-10	<1	101	0	24	9.0	22	30	1.0	8.6
10/24E-11D01	59-03-24	--	181	37	38	21	13	13	.4	4.8
11/16E-17E01	74-11-04	--	92	0	17	12	9.3	18	.4	2.7
11/16E-20F01	74-04-10	--	103	0	20	13	9.2	16	.4	3.3
11/16E-25N01	74-04-10	--	239	7	51	27	20	15	.6	3.0
11/16E-34K02	74-06-14	--	123	0	23	16	30	34	1.2	4.7
11/17E-01F01	74-06-13	--	69	0	18	5.9	24	41	1.3	4.0
11/17E-01Q01	74-11-05	--	95	0	25	7.9	19	29	.9	4.6
11/17E-03L01	74-05-21	--	76	0	16	8.8	27	42	1.4	3.9
11/17E-14E01	74-11-04	--	84	0	18	9.4	18	31	.9	3.2
11/17E-24R01	74-11-04	--	81	0	18	8.7	22	36	1.1	3.6
11/17E-26R01	74-11-04	--	80	0	18	8.5	21	35	1.1	3.8
11/17E-32L02	82-06-09	<1	99	0	20	12	15	24	.7	3.0
11/17E-33A01	74-10-01	--	156	0	36	14	22	23	.8	5.1
11/18E-01R01	73-11-29	--	151	1	39	13	17	19	.6	4.6
11/18E-09N01	74-10-01	--	80	0	20	7.4	25	39	1.3	4.4
11/18E-17B01	74-11-04	--	89	0	21	8.8	23	35	1.1	4.5
11/18E-17D01	73-11-29	--	299	0	72	29	64	31	1.7	4.9
11/18E-26L01	74-03-06	--	101	0	24	10	21	30	.9	4.7
11/18E-29P01	73-11-29	--	217	0	49	23	37	27	1.1	4.5
11/18E-30H01	74-11-04	--	78	0	19	7.5	24	38	1.2	4.5
11/19E-02L02	73-11-28	--	78	0	20	6.9	5.9	14	.3	1.4
11/19E-10Q01	74-09-20	--	29	0	9.6	1.1	10	41	.9	2.5
	82-06-09	<1	32	0	9.6	1.9	10	39	.8	2.3
11/19E-27H01	82-06-09	<1	91	1	23	8.2	8.2	16	.4	2.6
11/19E-30J01	73-11-29	--	113	0	29	9.9	11	17	.5	3.4
11/19E-35G01	74-03-05	--	111	0	28	10	9.0	15	.4	3.1
11/19E-35N01	62-11-02	--	116	0	30	10	13	19	.5	3.4
11/20E-02H01	82-06-10	<1	11	0	3.8	.4	52	86	7.1	5.6
11/20E-22R01	82-06-10	<1	62	0	18	4.2	17	36	1.0	3.7

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
10/21E-07K01	82-06-11	--	176	--	.0	--	141	9.0	5.3	.1
10/21E-19J02	60-07-13	--	--	--	--	--	--	15	7.2	--
10/21E-21H01	62-11-01	230	--	0	--	189	--	17	7.0	.5
10/21E-33R01	74-05-23	206	--	--	--	169	--	17	7.7	.2
10/21E-34L01	82-06-11	--	182	--	.0	--	144	12	5.8	.2
10/22E-15C01	82-06-10	--	412	--	.0	--	321	240	25	.3
10/22E-25E01	70-12-01	156	--	0	--	128	--	17	6.0	.4
	71-05-18	200	--	0	--	164	--	16	5.5	.4
10/22E-25F02	70-10-06	157	--	0	--	129	--	16	4.8	.5
	70-12-01	156	--	0	--	128	--	17	6.0	.4
10/22E-36E01	82-06-10	--	186	--	.0	--	152	<5.0	5.9	.4
10/26E-11D01	59-03-24	176	--	0	--	144	--	43	7.5	.2
11/16E-17E01	74-11-04	122	--	--	--	100	--	5.5	1.9	.3
11/16E-20F01	74-04-10	145	--	--	--	119	--	4.6	1.9	.9
11/16E-25N01	74-04-10	283	--	--	--	232	--	25	15	1.0
11/16E-34K02	74-06-14	210	--	--	--	172	--	18	2.8	.5
11/17E-01F01	74-06-13	142	--	--	--	117	--	<1.0	5.0	.7
11/17E-01Q01	74-11-05	139	--	--	--	114	--	11	3.4	.6
11/17E-03L01	74-05-21	168	--	--	--	138	--	1.4	4.4	.9
11/17E-14E01	74-11-04	133	--	--	--	109	--	9.6	2.3	.5
11/17E-24P01	74-11-04	151	--	--	--	124	--	.9	2.8	.6
11/17E-26R01	74-11-04	148	--	--	--	121	--	.9	2.5	.6
11/17E-32L02	82-06-09	--	155	--	.0	--	129	<5.0	2.2	.4
11/17E-33A01	74-10-01	241	--	--	--	198	--	9.9	4.2	.2
11/18E-01B01	73-11-29	193	--	--	--	150	--	21	5.5	.3
11/18E-09N01	74-10-01	150	--	--	--	131	--	.8	4.5	.7
11/18E-17B01	74-11-04	163	--	--	--	134	--	1.3	3.2	.6
11/18E-17D01	73-11-29	414	--	--	--	340	--	22	20	.8
11/18E-26L01	74-03-06	135	--	--	--	111	--	22	11	.2
11/18E-29P01	73-11-29	304	--	--	--	249	--	42	14	.4
11/18E-30H01	74-11-04	154	--	--	--	126	--	.5	3.1	.7
11/19E-02L02	73-11-28	100	--	--	--	82	--	5.1	2.9	.1
11/19E-10D01	74-09-20	65	--	--	--	53	--	2.3	1.4	.2
	82-06-09	--	64	--	.0	--	56	<5.0	1.3	.3
11/19E-27A01	82-06-09	--	110	--	.0	--	90	10	4.3	.2
11/19E-30J01	73-11-29	144	--	--	--	118	--	7.8	3.4	.2
11/19E-35G01	74-03-05	137	--	--	--	112	--	7.6	3.1	.1
11/19E-35N01	62-11-02	150	--	0	--	131	--	7.4	2.8	.2
11/20E-02H01	82-06-10	--	122	--	16	--	128	<5.0	5.7	.8
11/20E-22R01	82-06-10	--	87	--	.0	--	71	19	5.9	.3

TABLE 2.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS NO3)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
10/21E-07K01	82-06-11	32	--	194	--	--	--	1.6
10/21E-19J02	60-07-13	--	--	--	1.3	--	--	--
10/21E-21H01	62-11-01	51	--	280	--	.50	--	--
10/21E-33R01	74-05-23	--	--	--	--	--	.60	--
10/21E-34L01	82-06-11	37	--	204	--	--	--	.62
10/22E-15C01	82-06-10	46	--	775	--	--	--	4.9
10/22E-25E01	70-12-01	62	236	224	--	1.9	--	--
	71-05-18	63	298	279	--	--	.59	--
10/22E-25F02	70-10-06	62	216	223	--	1.1	--	--
	70-12-01	62	236	224	--	1.9	--	--
10/22E-36E01	82-06-10	63	--	230	--	--	--	<.10
10/26E-11D01	59-03-24	51	262	265	--	4.5	--	--
11/16E-17E01	74-11-04	--	--	--	--	--	.81	--
11/16E-20F01	74-04-10	--	--	--	--	--	1.2	--
11/16E-25N01	74-04-10	--	--	--	--	--	1.8	--
11/16E-34K02	74-06-14	--	--	--	--	--	.01	--
11/17E-01F01	74-06-13	--	--	--	--	--	.01	--
11/17E-01Q01	74-11-05	--	--	--	--	--	.74	--
11/17E-03L01	74-05-21	--	--	--	--	--	.02	--
11/17E-14E01	74-11-04	--	--	--	--	--	.28	--
11/17E-24P01	74-11-04	--	--	--	--	--	.01	--
11/17E-26P01	74-11-04	--	--	--	--	--	.01	--
11/17E-32L02	82-06-09	60	--	198	--	--	--	.64
11/17E-33A01	74-10-01	--	--	--	--	--	.78	--
11/18E-01R01	73-11-29	--	--	--	--	--	2.5	--
11/18E-09N01	74-10-01	--	--	--	--	--	.01	--
11/18E-17R01	74-11-04	--	--	--	--	--	.03	--
11/18E-17D01	73-11-29	--	--	--	--	--	15	--
11/18E-26L01	74-03-06	--	--	--	--	--	.10	--
11/18E-29P01	73-11-29	--	--	--	--	--	2.0	--
11/18E-30H01	74-11-04	--	--	--	--	--	.02	--
11/19E-02L02	73-11-28	--	--	--	--	--	.43	--
11/19E-10Q01	74-09-20	--	--	--	--	--	.05	--
	82-06-09	45	--	109	--	--	--	<.10
11/19E-27H01	82-06-09	33	--	144	--	--	--	1.8
11/19E-30J01	73-11-29	--	--	--	--	--	1.9	--
11/19E-35G01	74-03-05	--	--	--	--	--	2.3	--
11/19E-35N01	62-11-02	35	--	181	--	6.1	1.4	--
11/20E-02H01	82-06-10	50	--	200	--	--	--	<.10
11/20E-22R01	82-06-10	46	--	157	--	--	--	.29

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
10/21E-07K01	82-06-11	--	5	--	3
10/21E-19J02	60-07-13	--	--	--	--
10/21E-21H01	62-11-01	20	--	--	--
10/21E-33R01	74-05-23	--	290	--	260
10/21E-34L01	82-06-11	--	4	--	18
10/22E-15C01	82-06-10	--	<3	--	<1
10/22E-25F01	70-12-01	510	--	450	--
	71-05-18	20	--	<20	--
10/22E-25F02	70-10-06	30	--	<20	--
	70-12-01	510	--	450	--
10/22E-36E01	82-06-10	--	26	--	42
10/26E-11D01	59-03-24	680	--	--	--
11/16E-17E01	74-11-04	--	20	--	<10
11/16E-20F01	74-04-10	--	90	--	20
11/16E-25N01	74-04-10	--	40	--	<10
11/16E-34K02	74-06-14	--	2200	--	130
11/17E-01F01	74-06-13	--	50	--	30
11/17E-01Q01	74-11-05	--	50	--	<10
11/17E-03L01	74-05-21	--	80	--	40
11/17E-14E01	74-11-04	--	20	--	50
11/17E-24P01	74-11-04	--	130	--	340
11/17E-26R01	74-11-04	--	200	--	360
11/17E-32L02	82-06-09	--	4	--	1
11/17E-33A01	74-10-01	--	50	--	<10
11/18E-01B01	73-11-29	--	90	--	13
11/18E-09N01	74-10-01	--	50	--	50
11/18E-17R01	74-11-04	--	450	--	680
11/18E-17D01	73-11-29	--	20	--	38
11/18E-24L01	74-03-06	--	410	--	160
11/18E-29P01	73-11-29	--	40	--	13
11/18E-30H01	74-11-04	--	240	--	270
11/19E-02L02	73-11-28	--	50	--	<10
11/19E-10Q01	74-09-20	--	180	--	40
	82-06-09	--	<3	--	2
11/19E-27H01	82-06-09	--	4	--	<1
11/19E-30J01	73-11-29	--	120	--	<10
11/19E-35G01	74-03-05	--	20	--	<10
11/19E-35N01	62-11-02	110	110	--	--
11/20E-02H01	82-06-10	--	<3	--	<1
11/20E-22R01	82-06-10	--	72	--	12

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
11/20E-28P01	46 24 17	120 19 02	01	110ALVM	73-11-28	47	780.00	185	--	12.6
11/20E-36R01	46 24 12	120 15 29	01	--	70-12-01	281	--	463	7.8	17.9
11/21E-20D01	46 25 52	120 13 41	01	122SDLM	82-06-11	544	1090.00	358	7.5	18.2
11/21E-22N01	46 25 24	120 11 18	01	121YKIM	62-04-30	426	--	665	7.6	16.1
11/24E-14N01	46 25 55	119 47 00	01	--	70-11-13	407	--	219	7.5	15.0
11/26E-05B01	46 28 27	119 34 58	01	--	51-08-14	158	550.00	270	8.2	--
11/26E-34R01	46 23 28	119 32 01	01	--	59-03-24	1000	--	216	7.5	--
				--	70-11-19	1000	--	597	8.8	24.0
12/16E-13D01	46 32 02	120 46 29	01	121YKIM	51-08-30	146	1800.00	194	7.7	--
12/16E-17J01	46 31 45	120 50 38	01	110ALVM	51-08-30	11	2025.00	98	7.3	--
12/17E-12J03	46 32 31	120 37 50	01	122ELRG	82-07-12	625	1280.00	148	7.6	18.4
12/17E-16A02	46 32 01	120 41 30	01	121YKIM	71-09-23	868	--	186	7.8	20.8
12/17E-16D03	46 31 57	120 42 34	01	121YKIM	59-10-21	384	1510.00	185	7.9	15.5
12/17E-16R01	46 31 17	120 41 40	01	121YKIM	52-04-18	1078	1550.00	136	7.9	17.0
12/18E-05G02	46 33 41	120 35 33	01	110ALVM	51-08-29	10	1190.00	285	7.2	--
12/18E-05J01	46 33 27	120 35 25	01	110ALVM	51-08-29	18	1170.00	284	7.2	--
12/18E-06B02	46 33 47	120 36 54	01	112GLCV	82-06-08	70	1250.00	555	7.1	12.7
12/18E-08B01	46 32 58	120 35 30	01	121ELRG	73-11-30	632	1180.00	400	--	10.4
12/18E-10A01	46 32 48	120 32 49	01	121ELRG	74-09-19	176	1130.00	495	--	12.8
12/18E-11E01	46 32 41	120 32 25	01	121ELRG	51-08-30	213	1170.00	315	7.3	--
12/18E-11K01	46 32 31	120 31 52	01	121ELRG	74-09-17	445	1220.00	98	--	14.5
12/18E-12K01	46 32 33	120 30 36	01	121ELRG	74-09-17	225	1170.00	530	--	14.2
12/18E-27G01	46 30 07	120 33 11	01	121YKIM	74-06-14	1000	1145.00	283	--	23.6
12/18E-27H01	46 30 08	120 32 37	01	121YKIM	74-06-14	1020	1120.00	300	--	29.6
12/18E-32H01	46 29 07	120 35 11	01	121YKIM	74-05-23	1176	1130.00	250	--	25.2
12/19E-01E01	46 33 44	120 23 27	01	122ELRG	82-06-08	130	1035.00	302	7.4	13.4
12/19E-01Q01	46 33 06	120 22 55	01	--	62-11-02	--	--	263	8.4	30.0
12/19E-06M04	46 33 21	120 29 58	01	--	71-09-22	315	1000.00	251	7.6	16.2
12/19E-10L01	46 32 26	120 25 38	01	122ELRG	82-06-08	212	1030.00	710	7.7	14.3
12/19E-29K01	46 29 55	120 27 49	01	121ELRG	74-09-17	305	918.00	485	--	17.9
12/19E-35D01	46 29 21	120 24 54	01	--	62-11-02	141	--	462	7.4	13.9
12/23E-13B01	46 32 00	119 52 50	01	--	61-05-05	153	--	274	7.8	16.0
12/23E-28Q01S	46 29 35	119 56 38	01	--	70-09-21	--	--	201	7.2	15.4
12/24E-20N01	46 30 24	119 51 12	01	--	70-09-11	1200	--	276	8.0	26.0
12/25E-29C01S	46 30 15	119 42 50	01	--	60-09-12	--	--	221	7.8	--
13/12E-12H01	46 37 46	121 15 00	01	--	73-04-25	--	--	110	6.5	4.4
13/13E-06J01	46 38 33	121 14 45	01	--	65-03-29	--	--	133	6.9	5.0
				--	66-09-29	--	--	106	6.8	10.0
				--	73-07-11	--	--	160	8.3	--
13/13E-06K01	46 38 30	121 15 05	01	--	65-03-29	100	--	133	6.9	4.9

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
11/20E-28R01	73-11-28	--	79	0	20	7.1	7.6	17	.4	1.4
11/20E-36R01	70-12-01	--	179	0	47	15	19	18	.6	4.0
11/21E-20D01	82-06-11	<1	111	--	30	8.8	42	37	1.4	7.1
11/21E-22N01	62-04-30	--	242	0	64	20	43	27	1.2	7.2
11/24E-14N01	70-11-13	--	79	0	18	8.3	12	24	.6	4.5
11/26E-05R01	51-08-14	--	116	0	30	10	12	18	.5	4.5
11/26E-34R01	59-03-24	--	95	4	22	9.8	7.1	14	.3	2.1
	70-11-19	--	2	15	1.0	.0	122	92	35	15
12/16E-13D01	51-08-30	--	80	0	16	9.7	10	21	.5	1.8
12/16E-17J01	51-08-30	--	49	0	10	5.8	5.6	19	.4	3.7
12/17E-12J03	82-07-12	<1	53	--	12	5.7	8.5	24	.5	3.3
12/17E-16A02	71-09-23	--	41	0	11	3.4	24	53	1.7	4.1
12/17E-16D03	59-10-21	--	54	0	13	5.3	17	39	1.0	3.2
12/17E-16R01	52-04-18	--	57	0	12	6.6	7.2	20	.4	3.1
12/18E-05G02	51-08-29	--	107	0	23	12	19	27	.8	5.3
12/18E-05J01	51-08-29	--	118	0	24	14	16	22	.7	5.6
12/18E-06B02	82-06-08	<1	220	--	50	23	35	25	1.1	6.3
12/18E-08R01	73-11-30	--	172	26	36	20	15	15	.5	5.9
12/19E-10A01	74-09-19	--	205	0	44	23	16	14	.5	4.2
12/18E-11E01	51-08-30	--	141	0	30	16	9.6	13	.4	3.2
12/18E-11K01	74-09-17	--	41	0	9.8	4.0	3.5	14	.2	3.2
12/18E-12K01	74-09-17	--	242	0	54	26	15	12	.4	5.1
12/18E-27G01	74-06-14	--	108	0	20	14	22	30	.9	3.7
12/18E-27H01	74-06-14	--	75	0	19	6.8	35	48	1.8	4.8
12/18E-32H01	74-05-23	--	74	0	19	6.4	25	41	1.3	3.8
12/19E-01E01	82-06-08	<1	98	--	21	11	32	41	1.4	.7
12/19E-01D01	62-11-02	--	16	3	5.0	.9	56	86	6.3	2.6
12/19E-06M04	71-09-22	--	83	0	19	8.7	15	27	.7	4.3
12/19E-10L01	82-06-08	<1	280	--	71	25	48	27	1.3	2.9
12/19E-29K01	74-09-17	--	182	0	40	20	27	24	.9	5.7
12/19E-35D01	62-11-02	--	200	0	44	22	18	16	.6	4.0
12/23E-13B01	61-05-05	--	115	0	28	11	11	17	.5	2.9
12/23E-28D01S	70-09-21	--	77	0	18	7.9	9.0	20	.5	1.8
12/24E-20N01	70-09-11	--	90	0	18	11	21	31	1.0	7.7
12/25E-29C01S	60-09-12	--	96	0	22	10	7.2	14	.3	1.7
13/12E-12M01	73-04-25	--	44	0	12	3.5	4.3	17	.3	1.0
13/13E-06J01	65-03-29	--	58	0	17	3.8	4.2	13	.2	.7
	66-09-29	--	47	0	14	3.0	3.7	14	.2	.7
	73-07-11	--	69	0	25	1.7	4.3	12	.2	1.4
13/13E-06K01	65-03-29	--	58	0	17	3.8	4.2	13	.2	.7

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
11/20E-28R01	73-11-28	103	--	--	--	85	--	5.5	2.6	.1
11/20E-36R01	70-12-01	144	--	0	--	118	--	59	29	.2
11/21E-20D01	82-06-11	--	224	--	.0	--	176	18	7.6	.5
11/21E-22N01	62-04-30	231	--	0	--	189	--	70	53	.4
11/24E-14N01	70-11-13	109	--	0	--	89	--	15	4.2	.4
11/26E-05R01	51-08-14	143	--	0	--	117	--	22	4.5	.4
11/26E-34P01	59-03-24	111	--	--	--	91	--	11	3.2	.2
	70-11-19	154	--	15	--	151	--	.0	81	8.5
12/16E-13D01	51-08-30	116	--	0	--	95	--	4.4	3.0	.2
12/16E-17J01	51-08-30	74	--	0	--	61	--	2.4	.7	.2
12/17E-12J03	82-07-12	--	89	--	.0	--	76	25.0	1.2	.3
12/17E-16A02	71-09-23	124	--	0	--	102	--	.0	2.2	.8
12/17E-18D03	59-10-21	113	--	0	--	93	--	.4	1.8	.5
12/17E-19R01	52-04-18	85	--	0	--	70	--	4.4	1.2	.3
12/18E-05G02	51-08-29	150	--	0	--	131	--	8.0	11	.2
12/18E-05J01	51-08-29	180	--	0	--	148	--	5.1	2.5	.3
12/18E-06R02	82-06-08	-	294	--	.0	--	241	28	12	.3
12/18E-08R01	73-11-30	178	--	--	--	146	--	29	18	.3
12/18E-10A01	74-09-19	255	--	--	--	217	--	12	4.8	.3
12/18E-11E01	51-08-30	133	--	0	--	109	--	29	18	.3
12/18E-11K01	74-09-17	54	--	--	--	44	--	2.3	.7	.1
12/18E-12K01	74-09-17	308	--	--	--	253	--	13	6.9	.3
12/18E-27G01	74-06-14	180	--	--	--	148	--	1.5	6.3	.7
12/18E-27H01	74-06-14	175	--	--	--	144	--	4.1	11	1.2
12/18E-32H01	74-05-23	143	--	--	--	117	--	.8	10	.7
12/19E-01E01	82-06-08	--	184	--	.0	--	153	25.0	9.1	.7
12/19E-01Q01	62-11-02	156	--	3	--	133	--	.0	4.5	1.7
12/19E-06H04	71-09-22	144	--	0	--	118	--	4.8	4.8	.4
12/19E-10L01	82-06-08	--	331	--	.0	--	272	43	28	.6
12/19E-29K01	74-09-17	233	--	--	--	191	--	39	11	.5
12/19E-35D01	62-11-02	206	--	0	--	169	--	49	11	.2
12/23E-13R01	61-05-05	131	--	0	--	107	--	17	6.5	.6
12/23E-28Q01S	70-09-21	93	--	0	--	76	--	11	5.1	.4
12/24E-20N01	70-09-11	170	--	0	--	139	--	.2	3.8	.6
12/25E-29C01S	60-09-12	114	--	0	--	94	--	11	2.8	.3
13/12E-12H01	73-04-25	59	--	0	--	48	--	4.2	2.1	.1
13/13E-06J01	65-03-29	74	--	0	--	61	--	4.0	1.2	.1
	66-09-29	60	--	0	--	49	--	4.0	1.0	.2
	73-07-11	93	--	0	--	76	--	5.7	1.5	.1
13/13E-08K01	65-03-29	74	--	0	--	61	--	4.0	1.2	.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
11/20E-28R01	73-11-28	--	--	--	--	--	.65	--
11/20E-36R01	70-12-01	52	344	296	--	6.2	--	--
11/21E-20D01	82-06-11	40	--	247	--	--	--	<.10
11/21E-22N01	62-04-30	43	--	414	--	4.7	--	--
11/24E-14N01	70-11-13	45	156	161	--	.00	--	--
11/26E-05B01	51-08-14	41	195	195	--	1.7	--	--
11/26E-34R01	59-03-24	38	146	148	--	4.7	--	--
	70-11-19	75	408	409	--	.20	--	--
12/16E-13D01	51-08-30	54	155	156	--	1.6	.36	--
12/16E-17J01	51-08-30	47	111	112	--	1.0	.23	--
12/17E-12J03	82-07-12	63	--	145	--	--	--	.24
12/17E-16A02	71-09-23	71	194	177	--	--	.02	--
12/17E-16D03	59-10-21	53	149	150	--	.10	.02	--
12/17E-16R01	52-04-18	38	114	115	--	.20	.05	--
12/18E-05G02	51-08-29	52	209	209	--	1.5	.34	--
12/18E-05J01	51-08-29	51	205	207	--	1.8	.41	--
12/18E-06B02	82-06-08	49	--	348	--	--	--	3.3
12/18E-08R01	73-11-30	--	--	--	--	--	1.6	--
12/18E-10A01	74-09-19	--	--	--	--	--	.76	--
12/18E-11E01	51-08-30	61	251	233	--	2.7	.61	--
12/18E-11K01	74-09-17	--	--	--	--	--	.02	--
12/18E-12K01	74-09-17	--	--	--	--	--	1.4	--
12/18E-27G01	74-06-14	--	--	--	--	--	.02	--
12/18E-27H01	74-06-14	--	--	--	--	--	.02	--
12/18E-32H01	74-05-23	--	--	--	--	--	<.10	--
12/19E-01E01	82-06-08	56	--	227	--	--	--	<.10
12/19E-01Q01	62-11-02	30	--	184	--	.10	--	--
12/19E-06M04	71-09-22	69	204	199	--	--	.79	--
12/19E-10L01	82-06-08	56	--	457	--	--	--	2.6
12/19E-29K01	74-09-17	--	--	--	--	--	.71	--
12/19E-35D01	62-11-02	34	--	284	--	8.7	--	--
12/23E-13R01	61-05-05	54	217	195	--	4.1	--	--
12/23E-28Q01S	70-09-21	36	146	136	--	4.1	--	--
12/24E-20N01	70-09-11	56	204	202	--	.00	--	--
12/25E-29C01S	60-09-12	36	154	147	--	4.5	--	--
13/12E-12H01	73-04-25	21	81	77	--	--	--	.05
13/13E-06J01	65-03-29	15	89	84	--	.20	--	--
	66-09-29	17	73	73	--	.10	--	--
	73-07-11	19	126	104	--	--	--	.01
13/13E-06K01	65-03-29	15	89	84	--	.20	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
11/20E-28R01	73-11-28	--	1900	--	13
11/20E-36R01	70-12-01	30	--	<20	--
11/21E-20D01	82-06-11	--	390	--	120
11/21E-22N01	62-04-30	40	--	--	--
11/24E-14N01	70-11-13	30	--	<20	--
11/26E-05R01	51-08-14	--	--	--	--
11/26E-34R01	59-03-24	20	--	--	--
	70-11-19	50	--	<20	--
12/16E-13D01	51-08-30	60	60	--	<5
12/16E-17J01	51-08-30	110	110	--	<5
12/17E-12J03	82-07-12	--	4	--	<1
12/17E-16A02	71-09-23	100	--	50	--
12/17E-16D03	59-10-21	50	50	--	--
12/17E-16P01	52-04-18	270	270	--	<5
12/18E-05G02	51-08-29	30	30	--	280
12/18E-05J01	51-08-29	20	20	--	<5
12/18E-06B02	82-06-08	--	<3	--	<1
12/18E-08R01	73-11-30	--	70	--	38
12/18E-10A01	74-09-19	--	340	--	140
12/18E-11E01	51-08-30	30	30	--	<5
12/18E-11K01	74-09-17	--	4200	--	190
12/18E-12K01	74-09-17	--	50	--	<10
12/18E-27G01	74-06-14	--	140	--	50
12/18E-27H01	74-06-14	--	110	--	20
12/18E-32H01	74-05-23	--	50	--	20
12/19E-01E01	82-06-08	--	510	--	440
12/19E-01Q01	62-11-02	120	--	--	--
12/19E-06M04	71-09-22	40	--	170	--
12/19E-10L01	82-06-08	--	<3	--	<1
12/19E-29K01	74-09-17	--	240	--	170
12/19E-35D01	62-11-02	20	--	--	--
12/23E-13A01	61-05-05	200	--	--	--
12/23E-28D01S	70-09-21	20	--	<20	--
12/24E-20N01	70-09-11	80	--	50	--
12/25E-29C01S	60-09-12	30	--	--	--
13/12E-12M01	73-04-25	--	100	--	<10
13/13E-06J01	65-03-29	390	--	<50	--
	66-09-29	110	--	70	--
	73-07-11	--	60	--	<10
13/13E-06K01	65-03-29	390	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
13/17E-27C01	46 35 32	120 41 22	01	122ELBG	82-06-09	186	1510.00	630	7.7	12.3
13/18E-09K01	46 37 45	120 34 50	01	--	62-11-02	54	--	408	7.2	13.9
13/18E-21Q01	46 35 39	120 34 45	01	--	71-09-22	260	--	582	7.7	14.5
13/18E-28P01	46 34 43	120 34 24	01	112GLCV	82-07-12	32	1122.00	610	7.2	12.0
13/19E-22J01	46 35 48	120 25 29	01	122ELBG	82-06-08	131	1130.00	880	7.7	12.8
13/19E-26R01	46 34 40	120 24 16	01	122ELBG	82-06-08	76	1105.00	530	7.8	12.8
13/19E-31B01	46 34 38	120 29 39	01	--	65-06-11	225	--	165	--	--
				--	65-08-04	225	--	165	--	17.8
				--	65-08-06	225	--	163	--	--
13/19E-31B02	46 34 35	120 29 30	01	--	65-08-04	625	--	166	--	18.9
				--	65-08-06	625	--	166	--	--
				--	65-08-19	625	--	161	8.0	--
				--	65-08-27	625	--	161	8.0	--
				--	65-08-27	625	--	162	7.8	19.0
13/19E-31B04	46 34 38	120 29 45	01	112GLCV	82-06-08	55	1015.00	297	6.9	13.3
13/19E-31J01	46 34 05	120 29 22	01	--	51-08-29	84	1015.00	320	7.3	--
13/24E-25E01	46 35 10	119 46 08	01	--	51-11-30	777	924.00	291	7.8	23.9
				--	70-08-27	777	--	295	8.0	24.2
13/24E-26G01	46 35 13	119 46 40	01	--	51-12-01	606	--	292	7.8	20.0
13/24E-36D01	46 34 38	119 46 06	01	--	51-11-29	1092	909.00	277	7.7	23.3
				--	69-05-14	1092	--	290	8.5	--
14/14E-26G01	46 40 27	121 02 32	01	--	68-04-01	42	--	258	7.5	10.0
14/14E-26K01	46 40 20	121 02 20	01	--	68-03-15	150	--	390	8.9	10.0
				--	73-07-11	--	--	389	9.0	--
14/14E-28H01	46 40 26	121 04 45	01	--	66-09-27	101	--	188	6.9	11.1
				--	73-07-11	--	--	265	7.5	--
14/14E-28H02	46 40 28	121 04 48	01	--	61-12-14	50	--	250	7.1	--
14/15E-24D01	46 41 45	120 54 20	01	121CARV	68-05-09	60	--	553	7.4	11.0
				121CARV	73-07-11	--	--	573	6.9	--
14/17E-04H02	46 44 02	120 41 58	01	122GDRD	62-11-02	1000	1480.00	179	7.9	14.4
14/17E-33Q01	46 39 16	120 42 29	01	112GLCV	82-06-09	335	1725.00	985	7.4	--
14/18E-03N01S	46 43 37	120 36 07	01	--	48-11-19	--	--	370	7.6	15.0
14/18E-12B08	46 43 13	120 30 54	01	122SDLM	82-06-09	122	1290.00	655	7.6	13.7
14/18E-12C01	46 46 35	120 31 20	01	--	48-11-22	127	--	437	8.3	--
14/18E-12J02	46 42 58	120 30 39	01	122ELBG	82-06-08	290	1260.00	359	7.8	16.7
14/18E-13R02	46 41 46	120 30 42	01	--	48-11-19	60	--	676	7.7	--
14/18E-25D01	46 40 46	120 31 33	01	122ELBG	82-06-08	110	1195.00	435	7.7	16.1
14/18E-32E01	46 39 41	120 36 45	01	122ELBG	82-06-09	80	1265.00	305	7.0	20.4
14/18E-36N01	46 39 05	120 31 39	01	--	70-12-01	578	--	180	8.1	16.2
14/19E-19G01	46 41 18	120 29 42	01	--	61-05-05	134	--	823	7.9	12.0

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
13/17E-27C01	82-06-09	<1	215	--	48	23	55	35	1.7	8.8
13/18E-09K01	62-11-02	--	160	0	36	17	22	23	.8	3.9
13/18E-21Q01	71-09-22	--	249	0	55	27	26	18	.7	4.9
13/18E-28R01	82-07-12	<1	251	--	51	30	27	19	.8	6.0
13/19E-22J01	82-06-08	<1	303	--	72	30	82	37	2.1	2.9
13/19E-26R01	82-06-08	<1	175	--	47	14	50	38	1.7	3.8
13/19E-31R01	65-06-11	--	43	--	--	--	--	--	--	4.7
	65-08-04	--	43	--	--	--	--	--	--	4.6
	65-08-06	--	43	--	--	--	--	--	--	4.6
13/19E-31R02	65-08-04	--	44	--	--	--	--	--	--	4.6
	65-08-06	--	44	--	--	--	--	--	--	4.7
	65-08-19	--	44	0	13	2.9	16	41	1.1	4.6
	65-08-27	--	44	0	13	2.9	16	41	1.1	4.6
	65-08-27	--	46	0	13	3.2	15	39	1.0	4.8
13/19E-31R04	82-06-08	<1	117	--	33	8.4	11	16	.5	3.6
13/19E-31J01	51-08-29	--	130	0	34	11	12	16	.5	4.8
13/24E-25E01	51-11-30	--	97	0	19	12	27	35	1.2	8.5
	70-08-27	--	90	0	18	11	26	36	1.2	7.3
13/24E-26G01	51-12-01	--	99	0	20	12	27	35	1.2	6.7
13/24E-36D01	51-11-29	--	90	0	18	11	29	39	1.4	6.7
	69-05-14	--	90	9	18	11	27	37	1.3	6.4
14/14E-26G01	68-04-01	--	78	0	20	6.9	26	41	1.3	2.0
14/14E-26K01	68-03-15	--	10	20	2.5	1.0	90	93	13	3.0
	73-07-11	--	6	26	2.4	.1	92	97	17	.4
14/14E-28H01	66-09-27	--	60	0	17	4.3	19	40	1.1	2.2
	73-07-11	--	102	0	34	4.2	15	24	.7	2.1
14/14E-28H02	61-12-14	--	95	0	27	6.6	16	26	.7	2.2
14/15E-24D01	68-05-09	--	230	0	36	34	35	24	1.0	7.4
	73-07-11	--	242	0	41	34	36	24	1.0	7.1
14/17E-04H02	62-11-02	--	73	0	18	6.7	7.5	18	.4	3.3
14/17E-33D01	82-06-09	<1	462	--	91	57	41	16	.9	8.1
14/18E-03N01S	48-11-19	--	158	0	32	19	13	15	.5	5.8
14/18E-12R08	82-06-09	<1	298	--	65	33	25	15	.6	5.9
14/18E-12C01	48-11-22	--	183	0	42	19	23	21	.8	2.9
14/18E-12J02	82-06-08	<1	139	--	31	15	21	24	.8	5.8
14/18E-13R02	48-11-19	--	257	0	60	26	62	34	1.7	4.8
14/18E-25D01	82-06-08	<1	174	--	45	15	27	24	.9	5.6
14/18E-32E01	82-06-09	<1	136	--	38	10	12	16	.5	3.8
14/18E-36N01	70-12-01	--	45	0	15	1.9	19	46	1.3	2.7
14/19E-19G01	61-05-05	--	337	0	84	31	58	27	1.4	6.3

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
13/17E-27C01	82-06-09	--	366	--	.0	--	297	29	6.3	.9
13/18E-09K01	62-11-02	178	--	0	--	146	--	38	12	.3
13/18E-21J01	71-09-22	301	--	0	--	247	--	42	15	.3
13/18E-28R01	82-07-12	--	319	--	.0	--	260	32	14	.2
13/19E-22J01	82-06-08	--	515	--	.0	--	356	43	13	.6
13/19E-26P01	82-06-08	--	277	--	.0	--	227	29	12	.6
13/19E-31B01	65-06-11	--	--	--	--	--	--	4.4	2.5	--
	65-08-04	--	--	--	--	--	--	4.6	2.5	--
	65-08-06	--	--	--	--	--	--	4.4	2.5	--
13/19E-31B02	65-08-04	--	--	--	--	--	--	4.8	2.8	--
	65-08-06	--	--	--	--	--	--	4.8	2.5	--
	65-08-19	91	--	0	--	75	--	4.4	2.5	.3
	65-08-27	91	--	0	--	75	--	4.4	2.5	.3
	65-08-27	91	--	0	--	75	--	4.0	2.5	.3
13/19E-31B04	82-06-08	--	116	--	.0	--	95	19	11	.2
13/19E-31J01	51-08-29	116	--	0	--	95	--	21	26	.3
13/24E-25E01	51-11-30	189	--	0	--	155	--	1.8	5.8	.5
	70-08-27	180	--	0	--	148	--	.2	4.4	.7
13/24E-26G01	51-12-01	193	--	0	--	158	--	1.5	5.5	.5
13/24E-36D01	51-11-29	184	--	0	--	151	--	1.8	5.4	.6
	69-05-14	165	--	9	--	150	--	.0	4.8	.4
14/14E-26G01	68-04-01	158	--	0	--	130	--	5.6	2.5	.4
14/14E-26K01	68-03-15	204	--	20	--	201	--	4.0	1.5	.6
	73-07-11	197	--	26	--	205	--	4.7	2.0	.3
14/14E-28H01	66-09-27	105	--	0	--	86	--	5.2	5.5	.0
	73-07-11	152	--	0	--	125	--	8.1	3.8	.1
14/14E-28H02	61-12-14	139	--	0	--	114	--	11	4.2	.2
14/15E-24D01	68-05-09	372	--	0	--	305	--	.0	3.5	.3
	73-07-11	380	--	0	--	312	--	2.7	5.2	.3
14/17E-04H02	62-11-02	96	--	0	--	79	--	6.2	2.8	.2
14/17E-33Q01	82-06-09	--	478	--	.0	--	374	87	52	.7
14/18E-03N01S	48-11-19	193	--	0	--	158	--	18	9.1	.2
14/18E-12B08	82-06-09	--	296	--	.0	--	241	59	33	.3
14/18E-12C01	48-11-22	210	--	0	--	172	--	21	20	.4
14/18E-12J02	82-06-08	--	201	--	.0	--	164	14	8.4	.4
14/18E-13P02	48-11-19	442	--	0	--	363	--	28	5.2	.4
14/18E-25D01	82-06-08	--	217	--	.0	--	176	29	15	.4
14/18E-32E01	82-06-09	--	161	--	.0	--	130	14	4.5	.1
14/18E-36N01	70-12-01	88	--	0	--	72	--	13	3.3	.3
14/19E-19G01	61-05-05	459	--	0	--	376	--	68	13	.6

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
13/17E-27C01	82-06-09	53	--	404	--	--	--	3.8
13/18E-09K01	62-11-02	44	--	262	--	5.6	--	--
13/18E-21Q01	71-09-22	64	394	382	--	--	4.3	--
13/18E-28R01	82-07-12	58	--	375	--	--	--	3.3
13/19E-22J01	82-06-08	59	--	556	--	--	--	5.0
13/19E-26R01	82-06-08	53	--	346	--	--	--	2.6
13/19E-31A01	65-06-11	--	--	--	--	--	--	--
	65-08-04	--	--	--	--	--	--	--
	65-08-06	--	--	--	--	--	--	--
13/19E-31B02	65-08-04	--	--	--	--	--	--	--
	65-08-06	--	--	--	--	--	--	--
	65-08-19	61	149	149	--	.80	--	--
	65-08-27	61	149	149	--	.80	--	--
	65-08-27	67	152	155	--	1.2	--	--
13/19E-31B04	82-06-08	37	--	180	--	--	--	4.0
13/19E-31J01	51-08-29	39	221	205	--	6.0	--	--
13/24E-25E01	51-11-30	65	233	233	--	.10	--	--
	70-08-27	56	213	212	--	.00	--	--
13/24E-26G01	51-12-01	60	218	228	--	.00	--	--
13/24E-36D01	51-11-29	64	227	227	--	.10	--	--
	69-05-14	59	209	226	--	.20	--	--
14/14E-26G01	68-04-01	11	140	152	--	.30	--	--
14/14E-26K01	68-03-15	33	259	277	--	.20	--	--
	73-07-11	31	261	283	--	--	--	<.10
14/14E-28H01	66-09-27	32	136	137	--	.20	--	--
	73-07-11	38	201	183	--	--	--	.08
14/14E-28H02	61-12-14	40	179	176	--	.30	--	--
14/15E-24D01	68-05-09	79	351	378	--	.00	--	--
	73-07-11	77	376	400	--	--	--	.03
14/17E-04H02	62-11-02	44	--	136	--	1.8	--	--
14/17E-33Q01	82-06-09	60	--	632	--	--	--	6.1
14/18E-03N01S	48-11-19	66	262	258	--	3.1	--	--
14/18E-12R08	82-06-09	59	--	426	--	--	--	3.7
14/18E-12C01	48-11-22	58	309	290	--	16	--	--
14/18E-12J02	82-06-08	58	--	252	--	--	--	.82
14/18E-13R02	48-11-19	53	445	449	--	6.2	--	--
14/18E-25D01	82-06-08	32	--	276	--	--	--	.75
14/18E-32E01	82-06-09	37	--	199	--	--	--	3.8
14/18E-36N01	70-12-01	46	150	144	--	.60	--	--
14/19E-19G01	61-05-05	57	559	536	--	7.0	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
13/17E-27C01	82-06-09	--	<3	--	1
13/18E-09K01	62-11-02	10	--	--	--
13/18E-21Q01	71-09-22	30	--	<20	--
13/18E-28P01	82-07-12	--	4	--	1
13/19E-22J01	82-06-08	--	<3	--	<1
13/19E-26P01	82-06-08	--	<3	--	1
13/19E-31A01	65-06-11	--	--	--	--
	65-08-04	--	--	--	--
	65-08-06	--	--	--	--
13/19E-31A02	65-08-04	--	--	--	--
	65-08-06	--	--	--	--
	65-08-19	--	--	--	--
	65-08-27	--	--	--	--
	65-08-27	--	--	--	--
13/19E-31B04	82-06-09	--	15	--	<1
13/19E-31J01	51-08-29	20	--	--	--
13/24E-25E01	51-11-30	20	--	--	--
	70-08-27	90	--	100	--
13/24E-26G01	51-12-01	60	--	--	--
13/24E-36D01	51-11-29	30	--	--	--
	69-05-14	100	--	<20	--
14/14E-26G01	68-04-01	260	--	180	--
14/14E-26K01	68-03-15	2200	--	50	--
	73-07-11	--	500	--	20
14/14E-28H01	66-09-27	1000	--	260	--
	73-07-11	--	50	--	<10
14/14E-28H02	61-12-14	1700	--	--	--
14/15E-24D01	68-05-09	6300	--	140	--
	73-07-11	--	10000	--	110
14/17E-04H02	62-11-02	<10	--	--	--
14/17E-33Q01	82-06-09	--	8	--	2
14/18E-03N015	48-11-19	50	--	--	--
14/18E-12H09	82-06-09	--	<3	--	<1
14/18E-12C01	48-11-22	260	--	--	--
14/18E-12J02	82-06-09	--	5	--	3
14/18E-13R02	48-11-19	30	--	--	--
14/18E-25D01	82-06-08	--	7	--	130
14/18E-32E01	82-06-09	--	<3	--	3
14/18E-36N01	70-12-01	450	--	<20	--
14/19E-19G01	61-05-05	<10	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
14/19E-28B01	46 40 36	120 27 09	01	121CRRV	51-04-20	600	--	235	8.0	21.0
				121CRRV	53-09-29	600	--	244	7.8	21.0
				121CRRV	54-11-29	600	--	235	7.6	18.0
				121CRRV	55-10-05	600	--	238	8.1	20.0
				121CRRV	56-10-25	600	--	234	7.8	19.5
				121CRRV	58-01-06	600	--	236	7.8	20.0
				121CRRV	59-03-30	600	--	239	7.8	20.0
				121CRRV	60-09-14	600	--	220	7.9	20.0
				121CRRV	64-12-14	--	--	239	7.9	13.3
				121CRRV	67-02-28	600	--	237	8.1	20.0
14/19E-28F01	46 40 23	120 27 29	01	--	51-04-20	548	--	429	7.7	18.5
				--	52-09-18	548	--	344	7.6	17.0
				--	53-09-29	548	--	441	7.5	16.0
				--	54-11-29	548	--	425	7.3	15.5
				--	55-10-05	548	--	432	7.7	15.0
				--	62-01-08	548	--	422	7.4	14.1
				--	66-02-24	548	--	487	7.5	14.4
14/19E-28H01	46 40 26	120 26 50	01	121CRRV	52-09-17	590	--	246	7.9	19.0
				121CRRV	54-11-29	590	--	249	7.7	16.5
				121CRRV	55-10-05	590	--	247	7.7	17.0
				121CRRV	64-03-11	590	--	241	7.8	17.8
				121CRRV	66-03-22	590	--	245	7.4	17.0
14/19E-32L01	46 39 24	120 28 47	01	112CLCV	82-06-09	56	1160.00	360	7.5	--
15/17E-13C01	46 52 55	120 38 45	01	--	48-11-22	385	--	213	7.2	13.0
15/18E-33P01	46 39 07	120 35 05	01	--	48-11-22	400	--	266	7.5	--
15/19E-22L01	46 46 14	120 26 10	01	121YKIM	78-08-16	--	--	260	8.0	22.8
16/12E-23H01	46 51 45	121 18 05	01	--	73-07-17	--	--	273	7.3	--
16/14E-01F01	46 54 25	121 01 32	01	--	73-06-07	--	--	382	6.8	--
16/14E-01F02	46 54 29	121 01 37	01	--	68-01-11	46	--	361	7.2	9.0
16/14E-01J01	46 54 11	121 00 55	01	--	59-05-04	200	--	701	7.1	--
				--	73-06-07	200	--	229	7.0	--
16/14E-01P01	46 54 07	121 00 54	01	--	59-11-04	41	--	208	7.0	--
16/17E-19E01	46 51 51	120 45 31	01	--	48-11-19	115	--	202	7.4	--
16/17E-32J01S	46 49 51	120 43 11	01	--	48-11-19	--	--	185	7.7	16.5
17/11E-35P01	46 54 56	121 22 57	01	--	73-04-25	--	--	53	6.7	4.4
17/13E-12K01	46 58 34	121 09 32	01	--	68-05-12	77	--	239	9.4	7.0
17/13E-18G01	46 57 54	121 15 58	01	--	67-09-23	33	--	102	7.1	5.6
				--	73-06-07	33	--	103	7.0	--
17/13E-27N01	46 55 36	121 12 47	01	--	73-04-24	--	--	868	6.1	4.4
17/13E-33L01	46 55 00	121 13 48	01	--	67-09-22	--	--	119	7.0	7.8

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
14/19E-28R01	51-04-20	--	83	0	15	11	19	31	.9	4.2
	53-09-29	--	85	0	16	11	19	32	.9	3.6
	54-11-29	--	85	0	16	11	19	32	.9	3.6
	55-10-05	--	79	0	16	9.4	19	33	1.0	4.0
	56-10-25	--	83	0	15	11	19	32	.9	3.5
	58-01-06	--	81	0	16	10	18	31	.9	3.6
	59-03-30	--	88	0	17	11	18	30	.9	4.0
	60-09-14	--	83	0	15	11	19	32	.9	3.7
	64-12-14	--	79	0	15	10	19	33	1.0	4.0
	67-02-28	--	81	0	16	10	20	34	1.0	3.7
14/19E-28F01	51-04-20	--	166	0	35	19	32	28	1.1	7.2
	52-09-18	--	124	0	25	15	27	31	1.1	4.1
	53-09-29	--	164	0	36	18	32	29	1.1	4.5
	54-11-29	--	152	0	33	17	31	30	1.1	4.4
	55-10-05	--	155	0	34	17	30	29	1.1	4.4
	62-01-08	--	162	0	35	18	28	27	1.0	4.7
	66-02-24	--	185	0	41	20	33	27	1.1	4.9
14/19E-28H01	52-09-17	--	84	0	17	10	22	35	1.1	4.5
	54-11-29	--	84	0	17	10	21	34	1.0	4.3
	55-10-05	--	81	0	17	9.3	20	33	1.0	4.6
	64-03-11	--	81	0	16	9.9	21	35	1.0	4.6
	68-03-22	--	86	0	18	10	21	33	1.0	4.3
14/19E-32L01	82-06-09	<1	142	--	32	15	27	29	1.0	4.5
15/17E-13C01	48-11-22	--	60	0	12	7.3	23	43	1.3	5.0
15/18E-33P01	48-11-22	--	107	0	23	12	13	20	.6	4.0
15/19E-22L01	78-08-16	--	80	0	17	9.2	22	36	1.1	4.5
16/12E-23H01	73-07-17	--	19	0	5.1	1.4	47	83	4.9	1.6
16/14E-01F01	73-06-07	--	174	0	50	12	8.1	9	.3	1.3
16/14E-01F02	68-01-11	--	163	0	47	11	9.3	11	.3	1.9
16/14E-01J01	59-05-04	--	251	0	84	10	45	28	1.3	.7
	73-06-07	--	98	0	28	6.7	8.8	16	.4	1.2
16/14E-01R01	59-11-04	--	86	0	26	5.2	7.9	16	.4	1.3
16/17E-19E01	48-11-19	--	78	0	16	9.2	8.8	19	.4	4.8
16/17E-32J01S	48-11-19	--	57	0	12	6.6	17	37	1.0	4.3
17/11E-35R01	73-04-25	--	24	0	8.8	.4	2.5	18	.2	.4
17/13E-12K01	68-05-12	--	8	27	2.4	.6	54	92	8.4	1.8
17/13E-18G01	67-09-23	--	39	0	11	2.7	4.5	20	.3	.8
	73-06-07	--	39	0	11	2.9	4.2	18	.3	1.2
17/13E-27N01	73-04-24	--	384	0	96	35	47	21	1.1	4.8
17/13E-33L01	67-09-22	--	49	0	15	2.7	5.7	20	.4	1.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
14/19E-28R01	51-04-20	151	--	0	--	124	--	.7	4.1	.5
	53-09-29	149	--	0	--	122	--	.7	3.8	.5
	54-11-29	148	--	0	--	121	--	1.8	4.4	.5
	55-10-05	147	--	0	--	121	--	.2	3.5	.5
	56-10-25	149	--	0	--	122	--	.7	4.0	.4
	58-01-06	147	--	0	--	121	--	.3	4.0	.5
	59-03-30	146	--	0	--	120	--	.5	3.5	.6
	60-09-14	147	--	0	--	121	--	.8	4.0	.6
	64-12-14	149	--	0	--	122	--	.0	3.8	.5
	67-02-28	148	--	0	--	121	--	.4	4.0	.6
14/19E-28F01	51-04-20	246	--	0	--	202	--	23	9.2	.6
	52-09-18	198	--	0	--	162	--	12	6.4	.5
	53-09-29	239	--	0	--	196	--	23	8.8	.8
	54-11-29	218	--	0	--	179	--	21	9.2	.5
	55-10-05	222	--	0	--	182	--	21	8.2	.6
	62-01-08	222	--	0	--	182	--	24	9.0	.6
	66-02-24	244	--	0	--	200	--	32	14	.6
14/19E-28H01	52-09-17	154	--	0	--	126	--	1.2	4.3	.5
	54-11-29	154	--	0	--	126	--	1.4	4.9	.5
	55-10-05	151	--	0	--	124	--	.2	4.5	.5
	64-03-11	151	--	0	--	124	--	.4	3.8	.6
	68-03-22	152	--	0	--	125	--	.4	4.5	.9
14/19E-32L01	82-06-09	--	197	--	.0	--	159	19	13	.4
15/17E-13C01	48-11-22	124	--	0	--	102	--	9.8	2.0	.4
15/18E-33P01	48-11-22	146	--	0	--	120	--	10	5.2	.2
15/19E-22L01	78-08-16	--	--	--	--	120	--	1.5	4.3	.5
16/12E-23H01	73-07-17	42	--	0	--	34	--	2.3	59	.1
16/14E-01F01	73-06-07	176	--	0	--	144	--	25	19	.1
16/14E-01F02	68-01-11	174	--	0	--	143	--	25	12	.2
16/14E-01J01	59-05-04	200	--	0	--	164	--	17	106	.1
	73-06-07	116	--	0	--	95	--	17	4.7	.1
16/14E-01R01	59-11-04	98	--	0	--	80	--	18	3.5	.1
16/17E-19E01	48-11-19	116	--	0	--	95	--	3.3	2.4	.2
16/17E-32J01S	48-11-19	104	--	0	--	85	--	9.2	1.8	.4
17/11E-35R01	73-04-25	29	--	0	--	24	--	2.1	1.7	<.1
17/13E-12K01	68-05-12	84	--	27	--	114	--	1.8	12	.6
17/13E-18G01	67-09-23	46	--	0	--	38	--	12	.0	.1
	73-06-07	51	--	0	--	42	--	11	1.2	.1
17/13E-27N01	73-04-24	570	--	0	--	468	--	4.5	18	.1
17/13E-33L01	67-09-22	72	--	0	--	59	--	1.8	.0	.1

TABLE 2.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS NO3)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
14/19E-28A01	51-04-20	56	179	187	--	.00	--	--
	53-09-29	59	176	187	--	.10	--	--
	54-11-29	53	172	182	--	.70	--	--
	55-10-05	50	173	175	--	.00	--	--
	56-10-25	49	174	176	--	.20	--	--
	58-01-06	--	171	--	--	.00	--	--
	59-03-30	51	174	177	--	.30	--	--
	60-09-14	52	174	178	--	.20	--	--
	64-12-14	49	169	175	--	.00	--	--
	67-02-28	56	174	183	--	.10	--	--
14/19E-28F01	51-04-20	50	284	297	--	2.0	--	--
	52-09-18	50	231	237	--	.50	--	--
	53-09-29	53	293	293	--	3.8	--	--
	54-11-29	48	272	271	--	2.5	--	--
	55-10-05	45	280	269	--	2.1	--	--
	62-01-08	51	284	279	--	3.3	--	--
	66-02-24	46	310	311	--	4.8	--	--
14/19E-28H01	52-09-17	52	178	187	--	.20	--	--
	54-11-29	49	183	184	--	.70	--	--
	55-10-05	49	175	179	--	.20	--	--
	64-03-11	50	176	181	--	.00	--	--
	68-03-22	52	179	186	--	.10	--	--
14/19E-32L01	82-06-09	44	--	252	--	--	--	1.6
15/17E-13C01	48-11-22	42	167	162	--	.10	--	--
15/18E-33P01	48-11-22	59	205	198	--	2.1	--	--
15/19E-22L01	78-08-16	51	175	182	--	--	<.10	--
16/12E-23H01	73-07-17	12	145	160	--	--	--	<.10
16/14E-01F01	73-06-07	28	242	231	--	--	.25	--
16/14E-01F02	68-01-11	32	221	224	--	2.3	--	--
16/14E-01J01	59-05-04	24	416	385	--	.00	--	--
	73-06-07	26	156	150	--	--	--	.35
16/14E-01R01	59-11-04	25	140	135	--	1.2	--	--
16/17E-19E01	48-11-19	61	162	163	--	.70	--	--
16/17E-32J01S	48-11-19	53	158	155	--	.30	--	--
17/11E-35R01	73-04-25	10	39	40	--	--	--	.01
17/13E-12K01	68-05-12	32	210	201	--	.30	--	--
17/13E-18G01	67-09-23	25	84	79	--	.10	--	--
	73-06-07	24	95	83	--	--	--	<.10
17/13E-27N01	73-04-24	50	543	545	--	--	--	<.10
17/13E-33L01	67-09-22	24	89	86	--	.10	--	--

TABLE 2.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
14/19E-28R01	51-04-20	40	--	--	--
	53-09-29	150	--	--	--
	54-11-29	60	--	--	--
	55-10-05	80	--	--	--
	56-10-25	60	--	--	--
	58-01-06	30	--	--	--
	59-03-30	50	--	--	--
	60-09-14	40	--	--	--
	64-12-14	50	--	<50	--
	67-02-28	40	--	20	--
14/19E-28F01	51-04-20	50	--	--	--
	52-09-18	120	--	--	--
	53-09-29	200	--	--	--
	54-11-29	120	--	--	--
	55-10-05	80	--	--	--
	62-01-08	130	--	100	--
	66-02-24	220	--	100	--
14/19E-28H01	52-09-17	110	--	--	--
	54-11-29	860	--	--	--
	55-10-05	270	--	--	--
	64-03-11	140	--	<50	--
	68-03-22	2000	--	40	--
14/19E-32L01	82-04-09	--	<3	--	1
15/17E-13C01	48-11-22	130	--	--	--
15/19E-33P01	48-11-22	40	--	--	--
15/19E-22L01	78-08-16	120	--	20	--
16/12E-23H01	73-07-17	--	3100	--	110
16/14E-01F01	73-06-07	--	670	--	<10
16/14E-01F02	68-01-11	20	--	50	--
16/14E-01J01	59-05-04	790	--	--	--
	73-04-07	--	30	--	<10
16/14E-01P01	59-11-04	30	--	--	--
16/17E-19E01	48-11-19	80	--	--	--
16/17E-32J01S	48-11-19	60	--	--	--
17/11E-35R01	73-04-25	--	200	--	<10
17/13E-12K01	68-05-12	3700	--	240	--
17/13E-18G01	67-09-23	670	--	220	--
	73-06-07	--	2600	--	140
17/13E-27N01	73-04-24	--	6000	--	3200
17/13E-33L01	67-09-22	500	--	60	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
17/14E-04K01	46 59 27	121 05 48	01	--	73-07-17	--	--	94	7.0	--
17/14E-07C01	46 58 50	121 08 35	01	--	73-04-24	--	--	224	7.0	4.4
17/14E-09K01	46 58 29	121 05 41	01	--	68-02-29	40	--	118	7.5	8.0
				--	73-06-07	40	--	130	7.5	--
17/14E-15M01	46 57 43	121 04 57	01	--	73-07-17	--	--	56	7.0	--
18/14E-32D01	47 00 38	121 07 46	01	--	68-05-01	70	--	119	7.5	7.0
				--	73-06-07	70	--	121	7.0	--

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
17/14E-04K01	73-07-17	--	39	0	12	2.3	5.3	22	.4	.8
17/14E-07C01	73-04-24	--	66	0	18	5.2	25	44	1.4	2.2
17/14E-09K01	68-02-29	--	47	0	12	4.1	6.2	21	.4	2.0
	73-06-07	--	51	0	13	4.6	6.8	22	.4	2.0
17/14E-15M01	73-07-17	--	21	0	6.6	1.0	2.9	23	.3	.5
18/14E-32D01	68-05-01	--	44	0	13	2.9	5.8	22	.4	1.0
	73-06-07	--	49	0	14	3.3	6.1	21	.4	.9

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
17/14E-04K01	73-07-17	55	--	0	--	45	--	2.3	1.2	<.1
17/14E-07C01	73-04-24	137	--	0	--	112	--	2.5	2.4	.1
17/14E-09K01	68-02-29	66	--	0	--	54	--	3.6	2.0	.1
	73-06-07	80	--	0	--	66	--	4.5	1.7	.1
17/14E-15M01	73-07-17	31	--	0	--	25	--	2.5	.9	<.1
18/14E-32D01	68-05-01	72	--	0	--	59	--	.2	.0	.1
	73-06-07	78	--	0	--	64	--	2.7	1.4	<.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
17/14E-04K01	73-07-17	24	72	75	--	--	--	<.10
17/14E-07C01	73-04-24	26	145	150	--	--	--	<.10
17/14E-09K01	68-02-29	26	83	88	--	.60	--	--
	73-06-07	27	102	99	--	--	--	.01
17/14E-15M01	73-07-17	15	46	46	--	--	--	.06
18/14E-32D01	68-05-01	28	90	86	--	.10	--	--
	73-06-07	24	94	91	--	--	--	.03

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
17/14E-04K01	73-07-17	--	50	--	<10
17/14E-07C01	73-04-24	--	1300	--	90
17/14E-09K01	68-02-29	490	--	80	--
	73-06-07	290	--	20	--
17/14E-15M01	73-07-17	--	890	--	40
18/14E-32D01	68-05-01	160	--	<5	--
	73-06-07	180	--	--	<10

TABLE 2.--Continued

HANFORD

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
10/28E-02D01	46 23 06	119 16 44	01	--	81-04-21	80	394.55	395	7.9	17.1
10/28E-03P01	46 22 25	119 17 40	01	112GLCV	82-04-19	65	--	310	7.6	16.6
10/28E-11C03	46 22 24	119 16 26	01	--	77-04-25	102	375.00	330	8.0	15.9
10/28E-11F03	46 22 06	119 16 23	01	--	77-04-25	40	378.00	302	7.5	17.5
10/28E-14C01	46 21 19	119 14 17	01	112GLCV	82-04-19	80	400.39	450	7.5	16.6
10/28E-14N01	46 21 26	119 15 47	01	--	76-04-05	70	388.00	395	7.8	16.7
10/28E-17B01	46 21 27	119 19 54	01	--	51-06-15	228	458.00	206	9.2	--
11/28E-01F01	46 28 12	119 31 27	01	112GLCV	82-04-21	209	577.61	290	7.7	19.3
11/28E-03G01	46 28 23	119 33 13	01	--	51-06-13	200	514.00	258	8.0	--
11/27E-02D01	46 27 32	119 23 35	01	--	51-06-14	200	520.00	321	7.9	--
				--	76-04-05	200	522.00	436	8.0	18.4
11/27E-05D01	46 27 43	119 27 24	01	--	51-06-14	204	555.00	343	7.9	--
11/27E-14C01	46 26 36	119 23 54	01	112GLCV	82-04-20	350	537.68	422	8.2	19.1
11/27E-17B01	46 26 41	119 27 31	01	112GLCV	79-04-16	466	537.00	325	7.8	19.2
				112GLCV	82-04-20	466	536.37	335	7.7	19.3
11/27E-20M01	46 25 20	119 29 01	01	--	51-06-15	321	526.00	343	7.9	--
11/27E-22D01	46 25 52	119 25 24	01	112GLCV	74-11-20	174	523.50	513	7.9	18.5
				112GLCV	82-04-20	174	523.50	540	7.8	18.9
11/27E-26C01	46 25 00	119 24 01	01	--	77-04-25	143	504.00	420	7.8	18.0
				--	79-04-20	143	504.00	412	8.0	18.2
11/27E-26D01	46 24 57	119 24 20	01	--	51-05-16	148	506.00	418	7.4	--
11/28E-03P01	46 27 57	119 16 50	01	112GLCV	82-04-19	368	430.86	408	7.8	19.3
11/28E-04P01	46 27 47	119 19 00	01	--	75-06-12	454	--	322	7.8	17.9
11/28E-05C01	46 28 26	119 19 59	01	--	78-04-19	245	442.00	348	7.8	17.4
11/28E-09P01	46 26 48	119 18 07	01	--	77-04-25	95	440.00	352	8.0	17.0
11/28E-17D01	46 26 34	119 20 21	01	--	51-05-15	147	475.00	338	7.5	--
				--	74-11-19	147	--	418	7.9	--
11/28E-18M01	46 26 19	119 21 37	01	--	78-04-19	294	547.00	390	8.0	18.2
11/28E-21K01	46 25 18	119 18 40	01	--	75-06-13	142	--	416	7.5	--
11/28E-23D01	46 25 52	119 16 41	01	112GLCV	76-04-05	260	398.00	223	9.4	16.8
				112GLCV	82-04-19	260	397.90	255	8.3	--
11/28E-27P01	46 24 20	119 16 50	01	--	74-11-19	242	--	352	8.0	17.5
11/28E-29N01	46 24 14	119 20 25	01	--	51-09-12	110	433.00	281	8.0	--
11/28E-29P01	46 24 20	119 20 12	01	112GLCV	77-04-25	110	435.00	395	7.9	17.3
				112GLCV	82-04-19	110	435.50	394	7.9	17.7
12/25E-03D02	46 37 15	119 37 30	02	--	53-02-05	307	646.00	182	8.3	--
12/25E-03D03	46 33 34	119 40 40	01	--	81-04-22	203	643.90	365	7.7	19.0
12/25E-11F01	46 32 33	119 39 09	01	--	80-04-22	440	636.80	382	10.7	18.0
12/25E-11R01	46 32 12	119 38 13	01	--	77-04-28	279	641.00	241	8.0	15.0
12/25E-13E01	46 36 45	119 37 45	01	--	80-04-22	290	653.70	280	8.0	16.6

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
10/28E-02D01	81-04-21	145	25	40	11	22	24	.8	6.0	--
10/28E-03P01	82-04-19	117	0	35	7.2	17	23	.7	4.6	--
10/28E-11C03	77-04-25	105	28	33	5.5	21	30	.9	3.1	94
10/28E-11F03	77-04-25	96	6	29	5.8	22	32	1.0	3.9	110
10/28E-14C01	82-04-19	199	0	60	12	17	15	.5	6.0	--
10/28E-14D01	76-04-05	146	0	44	8.8	21	23	.8	6.5	191
10/28E-17R01	51-06-15	39	0	9.2	3.8	25	55	1.8	4.8	58
11/26E-01F01	82-04-21	119	0	33	8.9	11	16	.5	4.6	--
11/26E-03G01	51-08-13	103	0	23	11	12	19	.5	4.6	126
11/27E-02D01	51-06-14	127	6	37	8.3	17	21	.7	8.0	147
	76-04-05	151	30	44	9.9	21	22	.8	7.3	148
11/27E-05Q01	51-06-14	134	10	39	9.0	17	21	.7	6.1	151
11/27E-14C01	82-04-20	150	40	46	11	23	23	.8	6.6	--
11/27E-17R01	79-04-16	140	1	38	11	13	16	.5	4.4	170
	82-04-20	150	20	42	11	12	14	.4	4.4	--
11/27E-20M01	51-06-15	131	0	36	9.9	17	21	.7	10	142
11/27E-22D01	74-11-20	185	60	51	14	26	23	.9	7.3	152
	82-04-20	217	77	62	15	26	20	.8	7.7	--
11/27E-26C01	77-04-25	143	0	41	9.8	32	31	1.2	7.6	200
	79-04-20	127	0	36	8.9	36	36	1.4	7.8	210
11/27E-26D01	51-05-16	143	0	39	11	29	29	1.1	9.1	199
11/28E-03P01	82-04-19	170	10	45	14	19	19	.7	5.5	--
11/28E-04P01	75-06-12	100	0	24	9.7	30	38	1.3	6.9	160
11/28E-05C01	78-04-19	136	6	33	13	22	25	.8	6.5	160
11/28E-09R01	77-04-25	140	20	38	11	17	20	.6	6.0	150
11/28E-17D01	51-05-15	131	1	36	10	16	20	.6	6.9	158
	74-11-19	155	29	44	11	19	20	.7	6.3	153
11/28E-18M01	78-04-19	154	24	42	12	22	23	.8	6.9	160
11/28E-21K01	75-06-13	162	15	45	12	22	22	.8	6.6	179
11/28E-23D01	76-04-05	78	0	26	3.1	17	30	.9	7.0	53
	82-04-19	93	0	24	8.1	13	22	.6	4.7	--
11/28E-27R01	74-11-19	143	17	39	11	16	19	.6	4.6	153
11/28E-29N01	51-09-12	104	0	29	7.6	20	28	.9	7.2	136
11/28E-29P01	77-04-25	148	28	43	9.8	23	24	.9	5.6	150
	82-04-19	144	14	42	9.6	24	26	.9	5.8	--
12/25E-03D02	53-02-05	80	14	22	6.1	14	26	.7	3.9	80
12/25E-03D03	81-04-22	131	78	42	6.3	14	18	.6	4.6	--
12/25E-11F01	80-04-22	104	54	41	.4	22	30	1.0	8.0	--
12/25E-11R01	77-04-28	74	0	19	6.4	23	39	1.2	3.2	120
12/25E-13E01	80-04-22	97	0	23	7.1	25	37	1.2	3.2	130

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
10/28E-02D01	81-04-21	160	--	.0	--	120	41	24	.4	37
10/28E-03B01	82-04-19	145	--	.0	--	120	23	8.6	.3	35
10/28E-11C03	77-04-25	--	0	--	77	--	25	31	.5	13
10/28E-11E03	77-04-25	--	0	--	90	--	27	12	.9	19
10/28E-14C01	82-04-19	248	--	.0	--	200	18	4.1	.2	32
10/28E-14D01	76-04-05	--	0	--	157	--	29	9.1	.4	35
10/28E-17B01	51-06-15	--	16	--	74	--	2.1	10	1.0	18
11/26E-01F01	82-04-21	151	--	.0	--	120	18	5.2	.3	25
11/26E-03G01	51-08-13	--	0	--	103	--	20	5.9	.4	24
11/27E-02D01	51-06-14	--	0	--	121	--	33	8.0	.2	22
	76-04-05	--	0	--	121	--	41	11	.4	35
11/27E-05B01	51-06-14	--	0	--	124	--	40	6.5	.3	25
11/27E-14C01	82-04-20	147	--	.0	--	120	47	9.9	.4	40
11/27E-17B01	79-04-16	--	0	--	139	--	34	5.6	.4	36
	82-04-20	163	--	.0	--	130	36	5.8	.3	36
11/27E-20M01	51-06-15	--	0	--	133	--	40	6.1	.3	46
11/27E-22D01	74-11-20	--	0	--	125	--	81	23	.5	28
	82-04-20	173	--	.0	--	140	99	22	.5	33
11/27E-26C01	77-04-25	--	0	--	160	--	12	22	1.3	38
	79-04-20	--	0	--	172	--	13	22	1.3	39
11/27E-26D01	51-05-16	--	0	--	163	--	15	26	1.0	31
11/28E-03B01	82-04-19	197	--	.0	--	140	29	8.2	.3	43
11/28E-04B01	75-06-12	--	--	--	131	--	28	3.5	.4	37
11/28E-05C01	78-04-19	--	0	--	130	--	34	7.7	.4	36
11/28E-09B01	77-04-25	--	0	--	120	--	40	7.1	.4	34
11/28E-17D01	51-05-15	--	0	--	130	--	33	7.0	.4	31
	74-11-19	--	0	--	126	--	48	8.9	.3	35
11/28E-18M01	78-04-19	--	0	--	130	--	45	11	.4	37
11/28E-21K01	75-06-13	--	--	--	147	--	37	14	.4	32
11/28E-23D01	76-04-05	--	23	--	82	--	25	3.7	.5	31
	82-04-19	118	--	.0	--	98	15	4.6	.3	33
11/28E-27B01	74-11-19	--	0	--	126	--	25	5.8	.3	39
11/28E-29N01	51-09-12	--	0	--	112	--	32	6.0	.5	24
11/28E-29P01	77-04-25	--	0	--	120	--	43	18	.6	32
	82-04-19	155	--	.0	--	130	44	17	.4	32
12/25E-03D02	53-02-05	--	0	--	66	--	31	11	.3	4.3
12/25E-03D03	81-04-22	73	--	.0	--	53	57	21	.3	15
12/25E-11E01	80-04-22	--	--	--	50	--	59	13	.3	30
12/25E-11P01	77-04-28	--	0	--	98	--	13	5.9	.5	36
12/25E-13E01	80-04-22	--	0	--	107	--	20	11	.8	46

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
10/28E-02D01	81-04-21	257	274	--	--	14	--	3.1
10/28E-03P01	82-04-19	228	202	--	--	--	--	2.5
10/28E-11C03	77-04-25	190	179	4.1	--	--	--	--
10/28E-11F03	77-04-25	185	181	3.3	--	--	--	--
10/28E-14C01	82-04-19	306	271	--	--	--	--	4.5
10/28E-14D01	76-04-05	259	247	3.2	--	--	--	--
10/28E-17R01	51-06-15	130	135	--	.30	--	--	--
11/26E-01F01	82-04-21	179	185	--	--	4.2	--	1.0
11/26E-03G01	51-08-13	165	163	--	1.8	--	--	--
11/27E-02D01	51-06-14	203	206	--	5.8	--	--	--
11/27E-05Q01	76-04-05	284	263	6.7	--	--	--	--
11/27E-14C01	51-06-14	220	217	--	5.5	--	--	--
11/27E-17R01	82-04-20	293	276	--	--	--	--	5.9
	79-04-16	215	226	.31	--	--	.35	--
	82-04-20	224	228	--	--	--	--	.57
11/27E-20M01	51-06-15	238	245	--	.10	--	--	--
11/27E-22D01	74-11-20	--	307	--	--	.27	--	.06
	82-04-20	356	350	--	--	--	--	.28
11/27E-26C01	77-04-25	255	263	.96	--	--	--	--
	79-04-20	257	267	.89	--	--	.91	--
11/27E-26D01	51-05-16	252	259	--	1.0	--	--	--
11/28E-03R01	82-04-19	263	261	--	--	--	--	3.8
11/28E-04P01	76-06-12	--	219	--	--	1.2	--	.26
11/28E-05C01	79-04-19	225	231	2.0	--	--	--	--
11/28E-09R01	77-04-25	227	228	1.9	--	--	--	--
11/28E-17D01	51-05-15	224	218	--	4.3	--	--	--
	74-11-19	--	270	--	--	22	--	5.0
11/28E-18M01	79-04-19	251	255	3.0	--	--	--	--
11/28E-21K01	76-06-13	--	264	--	--	6.6	--	1.5
11/28E-23D01	76-04-05	174	186	3.1	--	--	--	--
11/28E-27R01	82-04-19	187	161	--	--	--	--	3.2
11/28E-29N01	74-11-19	--	238	--	--	22	--	4.9
11/28E-29P01	51-09-12	187	193	--	.80	--	--	--
	77-04-25	251	249	1.9	--	--	--	--
	82-04-19	254	251	--	--	--	--	1.9
12/25E-03D02	53-02-05	134	132	--	1.4	--	--	--
12/25E-03D03	81-04-22	216	221	--	--	23	--	5.7
12/25E-11F01	80-04-22	243	271	--	--	43	--	9.8
12/25E-11R01	77-04-28	161	167	.24	--	--	--	--
12/25E-13E01	80-04-22	179	207	--	--	6.6	--	1.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
10/28E-02D01	81-04-21	--	--	--	--
10/28E-03P01	82-04-19	--	--	--	--
10/28E-11C03	77-04-25	--	30	--	4
10/28E-11F03	77-04-25	--	30	--	4
10/28E-14C01	82-04-19	--	--	--	--
10/28E-14D01	76-04-05	--	<10	--	<4
10/28E-17B01	51-06-15	--	--	--	--
11/26E-01F01	82-04-21	--	--	--	--
11/26E-03G01	51-08-13	--	--	--	--
11/27E-02Q01	51-06-14	--	--	--	--
	76-04-05	--	<10	--	<10
11/27E-05Q01	51-06-14	--	--	--	--
11/27E-14C01	82-04-20	--	--	--	--
11/27E-17R01	79-04-16	--	--	--	--
	82-04-20	--	--	--	--
11/27E-20M01	51-06-15	--	--	--	--
11/27E-22D01	74-11-20	3400	1200	250	--
	82-04-20	--	--	--	--
11/27E-26C01	77-04-25	--	20	--	20
	79-04-20	--	--	--	--
11/27E-26D01	51-05-16	--	--	--	--
11/28E-03R01	82-04-19	--	--	--	--
11/28E-04P01	75-06-12	--	130	--	--
11/28E-05C01	78-04-19	--	--	--	--
11/28E-09R01	77-04-25	--	40	--	<10
11/28E-17D01	51-05-15	--	--	--	--
	74-11-19	70	30	<1	--
11/28E-18M01	78-04-19	--	--	--	--
11/28E-21K01	75-06-13	--	130	--	--
11/28E-23D01	76-04-05	--	20	--	<2
	82-04-19	--	--	--	--
11/28E-27R01	74-11-19	500	210	12	--
11/28E-29N01	51-09-12	--	--	--	--
11/28E-29P01	77-04-25	--	20	--	<10
	82-04-19	--	--	--	--
12/25E-03D02	53-02-05	10	--	--	--
12/25E-03D03	81-04-22	--	--	--	--
12/25E-11F01	80-04-22	--	--	--	--
12/25E-11R01	77-04-28	--	30	--	<10
12/25E-13E01	80-04-22	--	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NAVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
12/26E-04N01	46 33 00	119 34 14	01	--	77-04-27	384	748.00	405	7.7	21.4
12/26E-07R01	46 32 42	119 36 19	01	--	76-04-08	413	711.00	850	7.6	20.7
12/26E-07Q01	46 32 07	119 36 16	01	--	76-04-08	325	694.00	489	7.7	20.4
12/26E-08P01	46 32 11	119 35 17	01	--	78-04-18	322	726.00	400	7.8	21.2
				--	79-04-19	322	726.00	404	7.9	21.2
12/26E-09L01	46 32 25	119 34 09	01							
12/26E-12H01	46 32 28	119 29 47	01	--	79-04-17	354	748.00	395	7.8	22.2
12/26E-13A01	46 32 00	119 29 32	01	--	76-04-08	517	690.00	367	8.0	21.0
				112GLCV	76-04-08	145	540.00	433	7.9	20.6
12/26E-13H01	46 31 46	119 29 39	01	112GLCV	82-04-21	145	540.20	375	7.9	20.3
				--	75-06-12	126	516.00	448	7.7	--
				--	76-04-06	126	516.00	425	7.9	19.6
				--	77-04-26	126	516.00	420	7.8	19.8
				--	78-04-20	126	516.00	415	7.9	19.7
12/26E-14D01	46 32 00	119 31 50	01	--	79-04-17	126	516.00	410	7.9	20.0
				--	78-04-20	385	737.00	424	7.8	21.1
12/26E-15C01	46 31 55	119 32 52	01							
				--	74-11-20	440	--	429	7.7	--
				--	76-04-09	440	717.00	416	7.8	21.7
				--	77-04-28	440	717.00	420	7.7	21.5
				--	78-04-20	440	717.00	430	7.8	21.2
				--	79-04-20	440	717.00	420	7.8	21.5
12/26E-15J01	46 31 33	119 32 15	01							
12/26E-18E01	46 31 43	119 36 45	01	--	79-04-20	320	708.00	382	8.0	21.1
12/26E-18G01	46 31 44	119 36 23	01	--	76-04-08	580	668.00	297	7.8	20.5
				112GLCV	78-04-18	280	667.00	340	7.7	20.8
				112GLCV	79-04-19	280	667.00	340	7.8	20.8
				112GLCV	82-04-21	280	667.00	345	7.7	21.2
12/26E-22L01	46 30 35	119 32 45	01							
12/26E-24N01	46 30 21	119 30 36	01	--	80-04-24	315	676.60	392	8.0	18.1
12/26E-25Q01	46 29 28	119 29 51	01	--	81-04-21	680	591.47	325	7.9	20.5
				--	77-04-28	202	573.00	380	7.8	18.1
12/26E-25Q02	46 29 28	119 29 51	02	--	81-04-23	202	573.00	400	7.6	17.5
				--	53-08-19	202	--	318	8.2	--
12/27E-01G01	46 33 21	119 22 21	01							
				112GLCV	74-11-19	350	514.27	440	8.0	17.5
12/27E-03W01	46 27 41	119 25 31	01	112GLCV	80-04-21	350	514.30	447	8.0	17.2
12/27E-03Q01	46 33 04	119 25 04	01	112GLCV	82-04-19	350	514.27	450	7.9	17.6
				--	76-04-07	--	509.00	430	8.0	18.5
				--	75-06-12	--	--	507	7.7	17.7
12/27E-05Q01	46 33 01	119 27 32	01	--	80-04-23	120	466.50	460	8.0	18.0
12/27E-05R01	46 32 40	119 27 09	01	--	77-04-26	283	518.00	324	8.0	18.1
12/27E-15G01	46 31 38	119 24 48	01	--	75-06-13	204	554.00	361	7.8	--
				--	75-06-12	171	518.00	533	7.7	18.5
				--	76-04-06	171	518.00	515	8.0	18.2

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
12/26E-04N01	77-04-27	169	29	43	15	17	17	.6	5.3	170
12/26E-07R01	76-04-08	350	224	92	29	21	11	.5	7.3	154
12/26E-07Q01	76-04-08	194	0	51	16	28	23	.9	6.6	242
12/26E-08P01	78-04-18	161	21	43	13	20	21	.7	5.9	170
	79-04-19	145	0	40	11	23	25	.9	5.6	140
12/26E-09L01	79-04-17	153	5	40	13	21	22	.8	5.6	180
12/26E-12H01	74-04-08	95	0	25	7.9	41	46	1.9	8.4	184
12/26E-13A01	76-04-09	138	25	37	11	32	32	1.2	7.3	138
	82-04-21	121	11	32	9.9	28	32	1.1	6.1	--
12/26E-13H01	75-06-12	151	44	39	13	31	30	1.1	6.9	131
	76-04-06	107	0	38	2.9	29	35	1.3	7.0	143
	77-04-26	142	32	37	12	29	30	1.1	5.3	130
	78-04-20	148	38	38	13	29	29	1.1	6.4	140
	79-04-17	137	22	35	12	31	32	1.2	6.2	140
12/26E-14D01	78-04-20	187	27	50	15	21	19	.7	5.9	200
12/26E-15C01	74-11-20	158	0	42	13	27	26	1.0	5.8	204
	76-04-09	152	0	41	12	25	25	.9	6.1	209
	77-04-28	173	3	46	14	24	23	.8	5.7	210
	78-04-20	175	5	47	14	24	22	.8	6.0	210
	79-04-20	152	0	41	12	25	25	.9	5.7	220
12/26E-15J01	79-04-20	144	0	38	12	21	23	.8	4.9	200
12/26E-18E01	76-04-08	119	4	28	12	16	22	.7	4.3	140
12/26E-18G01	78-04-18	142	32	37	12	18	21	.7	4.5	140
	79-04-19	120	0	32	9.8	19	25	.8	4.3	150
	82-04-21	130	10	34	11	18	22	.7	4.1	--
12/26E-22L01	80-04-24	149	1	40	12	20	22	.7	5.1	180
12/26E-24N01	81-04-21	129	0	32	12	16	20	.6	6.0	--
12/26E-25Q01	77-04-28	153	43	43	11	18	20	.7	5.7	130
	81-04-23	151	41	44	10	19	21	.7	5.6	--
12/26E-25Q02	53-08-19	124	1	34	9.6	16	21	.6	6.8	150
12/27E-01G01	74-11-19	160	42	41	14	24	24	.9	5.4	144
	80-04-21	160	45	41	14	24	24	.9	5.8	140
	82-04-19	159	49	43	15	26	24	.9	5.4	--
12/27E-03N01	76-04-07	155	39	46	12	22	22	.8	7.3	154
12/27E-03Q01	75-06-12	192	74	48	15	30	25	1.0	7.3	132
	80-04-23	154	39	42	12	29	28	1.1	6.7	140
12/27E-05Q01	77-04-26	51	0	14	3.9	52	65	3.3	7.5	200
12/27E-05R01	75-06-13	141	18	40	10	18	21	.7	5.9	150
12/27E-15G01	75-06-12	190	85	53	14	31	25	1.0	7.0	128
	76-04-06	186	73	53	13	29	24	1.0	7.2	138

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
12/26E-04N01	77-04-27	--	0	--	140	--	39	8.3	.4	50
12/26E-07B01	76-04-08	--	0	--	126	--	33	32	.4	47
12/26E-07Q01	76-04-09	--	0	--	198	--	30	16	.4	39
12/26E-08P01	78-04-18	--	0	--	140	--	27	11	.4	38
	79-04-19	--	0	--	148	--	28	14	.4	43
12/26E-09L01	79-04-17	--								
12/26E-12H01	76-04-08	--	0	--	148	--	32	7.7	.4	47
12/26E-13A01	76-04-08	--	0	--	151	--	45	3.6	.6	48
	82-04-21	128	0	--	113	--	54	11	.7	42
12/26E-13H01	75-06-12	--	--	.0	--	110	45	11	.6	43
	76-04-06	--	--	--	107	--	54	10	.6	38
	77-04-26	--	0	--	117	--	52	11	.7	40
	78-04-20	--	0	--	110	--	55	12	.7	39
	79-04-17	--	0	--	110	--	52	14	.7	39
12/26E-14D01	78-04-20	--	0	--	115	--	59	16	.6	43
			0	--	160	--	47	8.2	.5	40
12/26E-15C01	74-11-20	--								
	76-04-09	--	0	--	167	--	36	7.6	.3	39
	77-04-28	--	0	--	171	--	41	7.3	.4	40
	78-04-20	--	0	--	170	--	34	7.7	.5	44
	79-04-20	--	0	--	170	--	33	7.8	.5	42
12/26E-15J01	79-04-20	--			180	--	32	7.6	.5	46
12/26E-18E01	76-04-08	--	0	--	164	--	33	4.3	.4	45
12/26E-18G01	78-04-18	--	0	--	115	--	27	16	.4	30
	79-04-19	--	0	--	110	--	25	13	.5	43
	82-04-21	147	0	--	123	--	24	12	.5	45
12/26E-22L01	80-04-24	--		.0	--	120	25	12	.4	43
12/26E-24N01	81-04-21	194	0	--	148	--	34	7.0	.6	46
12/26E-25Q01	77-04-28	--	--	.0	--	140	22	3.4	.4	62
	81-04-23	135	0	--	110	--	47	6.9	.5	28
12/26E-25Q02	53-08-19	--	--	.0	--	110	71	7.4	.4	29
			0	--	123	--	32	7.2	.1	20
12/27E-01G01	74-11-19	--								
	80-04-21	--	0	--	118	--	49	13	.4	39
	82-04-19	140	0	--	115	--	57	14	.5	39
12/27E-03N01	76-04-07	--	--	.0	--	120	60	12	.4	40
12/27E-03Q01	75-06-12	--	0	--	126	--	66	8.5	.4	35
			--	--	108	--	77	15	.4	36
12/27E-05Q01	80-04-23	--								
12/27E-05R01	77-04-26	--	0	--	115	--	61	9.6	.5	39
12/27E-15G01	75-06-13	--	0	--	160	--	2.7	3.6	.9	45
	75-06-12	--	--	--	123	--	45	5.5	.4	28
	76-04-06	--	--	--	105	--	66	17	.4	29
			0	--	113	--	45	17	.4	31

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
12/26E-04N01	77-04-27	269	262	4.4	--	--	--	--
12/26E-07R01	76-04-08	614	338	58	--	--	--	--
12/26E-07Q01	76-04-08	317	307	5.2	--	--	--	--
12/26E-08P01	78-04-18	256	242	5.6	--	--	--	--
	79-04-19	265	254	5.7	--	--	5.7	--
12/26E-09L01	79-04-17	259	255	3.8	--	--	3.8	--
12/26E-12H01	76-04-08	252	270	.21	--	--	--	--
12/26E-13A01	76-04-08	297	243	10	--	--	--	--
	82-04-21	257	239	--	--	--	--	5.9
12/26E-13H01	75-06-12	--	306	--	--	49	--	11
	76-04-06	295	251	7.8	--	--	--	--
	77-04-26	278	254	7.1	--	--	--	--
	78-04-20	273	261	6.0	--	--	--	--
	79-04-17	268	272	5.5	--	--	5.5	--
12/26E-14D01	78-04-20	278	286	2.4	--	--	--	--
12/26E-15C01	74-11-20	--	283	--	--	11	--	2.4
	76-04-09	272	276	2.3	--	--	--	--
	77-04-28	274	280	2.5	--	--	--	--
	78-04-20	261	278	2.4	--	--	--	--
	79-04-20	252	278	2.2	--	--	2.2	--
12/26E-15J01	79-04-20	255	259	1.8	--	--	1.8	--
12/26E-18E01	76-04-08	196	203	1.2	--	--	--	--
12/26E-18G01	78-04-18	223	222	4.2	--	--	--	--
	79-04-19	227	220	4.0	--	--	4.0	--
	82-04-21	230	220	--	--	--	--	3.8
12/26E-22L01	80-04-24	237	268	--	--	15	--	3.3
12/26E-24N01	81-04-21	232	250	--	--	.44	--	.10
12/26E-25Q01	77-04-28	248	245	2.3	--	--	--	--
	81-04-23	267	265	--	--	12	--	2.8
12/26E-25Q02	53-08-19	194	200	--	.80	--	--	--
12/27E-01G01	74-11-19	--	285	--	--	28	--	6.4
	80-04-21	297	300	--	--	36	--	8.1
	82-04-19	301	271	--	--	--	--	8.3
12/27E-03N01	76-04-07	291	273	5.2	--	--	--	--
12/27E-03Q01	75-06-12	--	347	--	--	53	--	12
	80-04-23	310	309	--	--	40	--	9.0
12/27E-05Q01	77-04-26	221	228	.01	--	--	--	--
12/27E-05R01	75-06-13	--	236	--	--	9.3	--	2.1
12/27E-15G01	75-06-12	--	356	--	--	75	--	17
	76-04-06	351	284	14	--	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
12/26E-04N01	77-04-27	--	30	--	<10
12/26E-07R01	76-04-08	--	<10	--	<7
12/26E-07Q01	76-04-08	--	<10	--	110
12/26E-09P01	78-04-18	--	--	--	--
	79-04-19	--	--	--	--
12/26E-09L01	79-04-17	--	--	--	--
12/26E-12H01	76-04-08	--	30	--	100
12/26E-13A01	76-04-08	--	30	--	50
	82-04-21	--	--	--	--
12/26E-13H01	75-06-12	--	730	--	--
	76-04-06	--	60	--	<4
	77-04-26	--	120	--	40
	78-04-20	--	--	--	--
	79-04-17	--	--	--	--
12/26E-14D01	78-04-20	--	--	--	--
12/26E-15C01	74-11-20	2200	1100	86	--
	76-04-09	--	<10	--	<4
	77-04-28	--	30	--	<10
	78-04-20	--	--	--	--
	79-04-20	--	--	--	--
12/26E-15J01	79-04-20	--	--	--	--
12/26E-18E01	76-04-08	--	140	--	<3
12/26E-18G01	78-04-18	--	--	--	--
	79-04-19	--	--	--	--
	82-04-21	--	--	--	--
12/26E-22L01	80-04-24	--	--	--	--
12/26E-24N01	81-04-21	--	--	--	--
12/26E-25Q01	77-04-28	--	<10	--	<10
	81-04-23	--	--	--	--
12/26E-25Q02	53-09-19	--	--	--	--
12/27E-01G01	74-11-19	20	<10	4	--
	80-04-21	--	--	--	--
	82-04-19	--	--	--	--
12/27E-03N01	76-04-07	--	<10	--	<4
12/27E-03Q01	75-06-12	--	310	--	--
	80-04-23	--	--	--	--
12/27E-05Q01	77-04-26	--	170	--	50
12/27E-05R01	75-06-13	--	360	--	--
12/27E-15G01	75-06-12	--	120	--	--
	76-04-06	--	30	--	20

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
12/27E-15S01	46 31 38	119 24 48	01	--	77-04-26	171	518.00	522	7.9	18.4
				--	78-04-19	171	518.00	526	7.9	18.4
				--	79-04-16	171	518.00	506	8.0	18.7
12/27E-16M01	46 31 24	119 26 56	01	--	78-04-19	212	529.00	454	7.9	20.5
				--	80-04-24	212	529.30	440	8.0	19.4
12/27E-18C01	46 32 00	119 28 55	01	--	79-04-16	167	537.00	405	7.9	21.5
12/27E-19D02	46 30 57	119 29 14	01	--	78-04-19	253	559.00	418	7.9	19.2
12/27E-20P01	46 29 29	119 27 36	01	--	76-04-06	162	524.00	455	7.9	19.4
12/27E-24M01	46 30 35	119 23 04	01	--	76-04-06	350	443.00	461	8.0	17.2
12/27E-27P01	46 29 37	119 24 25	01	--	76-04-06	158	506.00	460	7.9	17.5
12/27E-31Q01	46 28 44	119 29 43	01	--	78-04-20	160	515.00	300	7.8	19.0
				--	79-04-19	160	515.00	310	7.9	19.1
12/27E-33J01	46 28 56	119 25 51	01	112GLCV	76-04-05	350	524.00	445	7.9	18.5
				112GLCV	82-04-20	350	523.83	445	7.9	18.8
12/27E-35J01	46 28 54	119 23 20	01	112GLCV	75-06-13	163	548.36	408	7.7	--
				112GLCV	82-04-20	163	548.36	445	7.9	19.4
12/28E-05R01	46 33 38	119 19 59	01	112GLCV	82-04-19	95	--	395	7.9	17.8
12/28E-05Q01	46 32 56	119 19 41	01	--	75-06-11	420	437.80	357	7.7	--
				--	80-04-21	420	437.80	390	8.1	17.3
12/28E-18D01	46 31 52	119 21 50	01	--	51-09-12	164	498.00	284	7.8	--
				--	76-04-07	164	500.00	362	8.0	17.3
				--	80-04-23	164	499.80	380	7.9	17.5
12/28E-19F01	46 30 49	119 21 32	01	--	74-11-19	90	--	486	8.0	16.5
				--	76-04-07	90	466.00	468	8.0	16.3
				--	77-04-26	90	466.00	485	7.8	16.5
				--	78-04-17	90	466.00	450	7.9	16.4
				--	79-04-16	90	466.00	462	7.9	16.6
12/28E-19N01	46 30 43	119 20 09	01	--	80-04-23	119	--	349	8.0	17.5
12/28E-28Q01	46 29 40	119 19 25	01	--	77-04-26	321	467.00	298	8.0	19.3
12/28E-31H01	46 29 06	119 20 46	01	112GLCV	53-02-06	105	433.00	351	7.8	--
				112GLCV	53-06-10	105	433.19	374	7.6	--
				112GLCV	75-06-12	105	433.19	457	7.8	16.2
				112GLCV	82-04-20	105	433.19	505	7.9	19.0
13/25E-01N02	46 38 18	119 39 20	01	--	53-09-21	790	420.00	296	7.6	--
13/25E-03Q01	46 38 20	119 40 24	01	--	79-04-18	52	437.00	280	7.5	21.2
13/25E-07M01	46 37 40	119 44 40	01	--	53-09-02	93	450.00	191	7.5	15.5
13/25E-11M01	46 37 43	119 38 44	01	--	77-04-27	105	472.00	310	7.6	39.1
13/25E-16J01	46 36 49	119 41 05	01	--	78-04-18	160	510.00	320	7.8	17.4
				--	81-04-22	160	509.73	325	7.8	17.0
13/25E-23L01	46 35 51	119 39 21	01	--	81-04-22	355	577.96	285	7.7	17.3

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
12/27E-15S01	77-04-26	181	71	51	13	29	25	1.0	6.5	130
	78-04-19	198	78	52	14	30	25	1.0	6.9	130
	79-04-16	168	53	46	13	29	26	1.0	6.6	140
12/27E-16M01	78-04-19	161	51	43	13	30	28	1.1	7.2	140
	80-04-24	138	31	37	11	31	32	1.2	6.9	130
12/27E-18C01	79-04-16	125	10	32	11	31	34	1.2	6.8	140
12/27E-19D02	78-04-19	164	24	46	12	23	22	.8	6.7	170
12/27E-20P01	76-04-06	171	36	47	13	25	23	.9	7.6	164
12/27E-24M01	76-04-06	165	45	48	11	23	22	.8	7.1	166
12/27E-27R01	76-04-06	178	62	53	11	20	19	.7	8.0	141
12/27E-31Q01	78-04-20	130	0	34	11	17	21	.7	6.0	170
	79-04-19	114	0	30	9.4	17	23	.7	5.7	180
12/27E-33J01	76-04-05	165	41	46	12	22	22	.8	7.3	151
	82-04-20	169	39	48	12	23	22	.8	6.3	--
12/27E-35J01	75-06-13	156	33	47	9.3	20	21	.7	7.2	150
	82-04-20	180	60	54	11	20	19	.7	6.4	--
12/28E-05R01	82-04-19	152	32	41	12	19	21	.7	5.3	--
12/28E-05Q01	75-06-11	145	23	40	11	17	19	.6	6.0	149
	80-04-21	145	22	40	11	17	20	.6	5.8	150
12/28E-18D01	51-09-12	106	0	28	8.8	17	24	.7	7.7	145
	76-04-07	139	8	40	9.5	19	22	.7	5.5	160
	80-04-23	149	18	43	10	19	21	.7	5.5	150
12/28F-19F01	74-11-19	189	70	56	12	19	17	.6	6.4	145
	76-04-07	180	58	54	11	19	18	.6	6.9	149
	77-04-26	187	77	55	12	20	18	.7	6.3	140
	78-04-17	188	68	54	13	20	18	.7	6.7	150
	79-04-16	159	46	48	12	21	20	.7	6.4	150
12/28E-19N01	80-04-23	144	13	43	8.9	13	16	.5	5.7	150
12/28E-28D01	77-04-26	127	17	35	9.5	13	17	.5	5.9	140
12/28E-31H01	53-02-06	146	24	42	10	13	16	.5	4.8	149
	53-06-10	156	26	47	9.5	14	16	.5	5.2	158
	75-06-12	198	92	61	11	12	11	.4	6.4	129
	82-04-20	--	--	--	--	--	--	--	--	--
13/25E-01N02	53-09-21	93	0	19	11	22	31	1.0	11	143
13/25E-03Q01	79-04-18	113	15	33	7.5	9.3	15	.4	4.5	120
13/25E-07W01	53-09-02	93	11	26	6.7	3.5	7	.2	1.8	100
13/25E-11H01	77-04-27	132	34	43	5.9	10	14	.4	4.9	120
13/25E-16J01	78-04-18	143	23	36	13	11	14	.4	4.7	150
	81-04-22	134	24	34	12	11	15	.4	4.4	--
13/25E-23L01	81-04-22	124	14	30	12	7.6	11	.3	3.5	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
12/27E-15G01	77-04-26	--	0	--	110	--	44	28	.4	31
	78-04-19	--	0	--	110	--	41	14	.4	30
	79-04-16	--	0	--	115	--	46	15	.4	33
12/27E-16M01	79-04-19	--	0	--	110	--	54	10	.7	42
	80-04-24	--	0	--	107	--	58	11	.7	43
12/27E-18C01	79-04-16	--	0	--	115	--	50	11	.6	45
12/27E-19D02	78-04-19	--	0	--	140	--	55	7.5	.5	35
12/27E-20P01	76-04-06	--	0	--	135	--	67	9.2	.6	42
12/27E-24M01	76-04-06	--	0	--	120	--	55	13	.4	36
12/27E-27P01	76-04-06	--	0	--	116	--	53	14	.4	36
12/27E-31Q01	78-04-20	--	0	--	140	--	20	4.2	.5	47
	79-04-19	--	0	--	148	--	21	4.0	.4	48
12/27E-33J01	76-04-05	--	0	--	124	--	42	9.8	.5	36
	82-04-20	163	--	.0	--	130	60	9.9	.4	36
12/27E-35J01	75-06-13	--	--	--	123	--	57	6.0	.4	30
	82-04-20	147	--	.0	--	120	84	6.7	.3	33
12/28E-05R01	82-04-19	151	--	.0	--	120	38	11	.3	39
12/28E-05Q01	75-06-11	--	--	--	122	--	28	6.9	.4	37
	80-04-21	--	0	--	123	--	31	9.3	.4	38
12/28E-18D01	51-09-12	--	0	--	119	--	20	6.8	.3	10
	76-04-07	--	0	--	131	--	33	8.7	.4	31
	80-04-23	--	0	--	131	--	38	11	.4	33
12/28E-19F01	74-11-19	--	0	--	119	--	46	13	.2	36
	78-04-07	--	0	--	122	--	50	13	.3	34
	77-04-26	--	0	--	110	--	52	12	.3	36
	78-04-17	--	0	--	120	--	49	11	.3	34
	79-04-16	--	0	--	123	--	56	13	.3	37
12/28E-19N01	80-04-23	--	0	--	131	--	27	6.8	.3	32
12/28E-28Q01	77-04-26	--	0	--	110	--	24	6.4	.3	32
12/28E-31H01	53-02-06	--	0	--	122	--	35	8.4	.3	30
	53-06-10	--	0	--	130	--	34	11	.3	19
	75-06-12	--	--	--	106	--	53	14	.3	28
	82-04-20	122	--	.0	--	100	65	19	.2	--
13/25E-01N02	53-09-21	--	0	--	117	--	23	8.0	.4	39
13/25E-03Q01	79-04-18	--	0	--	98	--	42	3.9	.2	37
13/25E-07M01	53-09-02	--	0	--	82	--	15	1.5	.2	25
13/25E-11M01	77-04-27	--	0	--	98	--	42	6.6	.2	46
13/25E-16J01	78-04-18	--	0	--	120	--	28	9.1	.4	42
	81-04-22	148	--	.0	--	110	30	21	.3	42
13/25E-23L01	81-04-22	143	--	.0	--	110	20	7.5	.3	34

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
12/27E-15G01	77-04-26	339	287	16	--	--	--	--
	78-04-19	325	272	16	--	--	--	--
	79-04-16	335	278	17	--	--	17	--
12/27E-16M01	78-04-19	299	269	11	--	--	--	--
	80-04-24	292	296	--	--	34	--	7.6
12/27E-18C01	79-04-16	272	256	7.5	--	--	7.5	--
12/27E-19D02	78-04-19	267	269	3.0	--	--	--	--
12/27E-20P01	76-04-06	317	293	6.2	--	--	--	--
12/27E-24M01	76-04-06	319	266	8.9	--	--	--	--
12/27E-27R01	76-04-06	316	265	12	--	--	--	--
12/27E-31Q01	78-04-20	202	223	.00	--	--	--	--
	79-04-19	210	224	.13	--	--	.15	--
12/27E-33J01	76-04-05	299	270	6.6	--	--	--	--
	82-04-20	297	276	--	--	--	--	5.8
12/27E-35J01	75-06-13	--	267	--	--	16	--	3.6
	82-04-20	305	288	--	--	--	--	4.7
12/28E-05R01	82-04-19	281	240	--	--	--	--	7.1
12/28E-05Q01	75-06-11	--	244	--	--	24	--	5.4
	80-04-21	271	259	--	--	32	--	7.3
12/28E-18D01	51-09-12	164	170	--	.30	--	--	--
	76-04-07	235	226	4.4	--	--	--	--
	80-04-23	254	263	--	--	24	--	5.4
12/28E-19F01	74-11-19	--	318	--	--	58	--	13
	76-04-07	314	262	13	--	--	--	--
	77-04-26	313	263	13	--	--	--	--
	79-04-17	302	262	13	--	--	--	--
	79-04-16	306	268	13	--	--	13	--
12/28E-19N01	80-04-23	215	236	--	--	21	--	4.7
12/28E-28Q01	77-04-26	193	195	2.5	--	--	--	--
12/28E-31H01	53-02-06	233	217	--	16	--	--	--
	53-06-10	244	218	--	14	--	--	--
	75-06-12	--	306	--	--	53	--	12
	82-04-20	339	--	--	--	--	--	1.4
13/25E-01N02	53-09-21	216	204	--	.00	--	--	--
13/25E-03Q01	79-04-18	186	196	.77	--	--	.77	--
13/25E-07M01	53-09-02	128	129	--	1.1	--	--	--
13/25E-11H01	77-04-27	221	218	1.1	--	--	--	--
13/25E-16J01	78-04-18	205	218	1.3	--	--	--	--
	81-04-22	220	233	--	--	5.8	--	1.3
13/25E-23L01	81-04-22	181	185	.47	--	--	.48	.49

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
12/27E-15G01	77-04-26	--	30	--	20
	78-04-19	--	--	--	--
	79-04-16	--	--	--	--
12/27E-16M01	78-04-19	--	--	--	--
	80-04-24	--	--	--	--
12/27E-18C01	79-04-16	--	--	--	--
12/27E-19D02	78-04-19	--	--	--	--
12/27E-20P01	76-04-06	--	30	--	<4
12/27E-24M01	76-04-06	--	<10	--	<4
12/27E-27R01	76-04-06	--	20	--	<4
12/27E-31Q01	78-04-20	--	--	--	--
	79-04-19	--	--	--	--
12/27E-33J01	76-04-05	--	20	--	<4
	82-04-20	--	--	--	--
12/27E-35J01	75-06-13	--	20	--	--
	82-04-20	--	--	--	--
12/28E-05A01	82-04-19	--	--	--	--
12/28E-05Q01	75-06-11	--	180	--	--
	80-04-21	--	--	--	--
12/28E-18D01	51-09-12	--	--	--	--
	76-04-07	--	<10	--	<4
	80-04-23	--	--	--	--
12/28E-19F01	74-11-19	14	20	12	--
	76-04-07	--	<10	--	20
	77-04-26	--	20	--	8
	78-04-17	--	--	--	--
	79-04-16	--	--	--	--
12/28E-19N01	80-04-23	--	--	--	--
12/28E-28Q01	77-04-26	--	20	--	20
12/29E-31H01	53-02-06	20	--	--	--
	53-06-10	--	--	--	--
	75-06-12	--	3900	--	--
	82-04-20	--	--	--	--
13/25E-01N02	53-09-21	--	--	--	--
13/25E-03Q01	79-04-18	--	--	--	--
13/25E-07M01	53-09-02	70	--	--	--
13/25E-11H01	77-04-27	--	30	--	4
13/25E-16J01	78-04-18	--	--	--	--
	81-04-22	--	--	--	--
13/25E-23L01	81-04-22	--	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
13/25E-25R01	46 35 31	119 37 40	01	--	78-04-18	192	583.00	350	8.5	17.7
				--	80-04-22	192	583.20	294	9.1	17.9
				--	81-04-22	192	583.24	255	7.7	17.0
13/25E-26N01	46 34 40	119 39 49	01	--	81-04-23	600	743.00	333	8.0	20.0
13/25E-27C01	46 35 30	119 40 35	01	--	80-04-22	235	617.40	304	8.1	17.7
13/25E-36G01	46 35 05	119 44 15	01	--	51-12-01	1110	831.00	277	7.8	28.0
				--	53-09-02	1110	--	289	7.7	30.5
				--	54-10-28	1110	--	291	7.4	29.0
				--	56-10-24	1110	--	286	8.0	21.0
				--	69-05-14	1110	--	290	8.1	--
				--	70-08-27	1110	--	287	8.1	26.9
				--	70-09-08	1110	--	288	8.1	27.0
				--	77-04-27	1110	837.00	285	8.0	26.8
13/25E-36D01	46 34 25	119 38 25	01	--	75-06-11	280	--	388	7.6	--
13/26E-02N01	46 38 10	119 32 00	01	--	81-04-23	210	507.00	328	7.9	17.5
13/26E-05D03	46 39 00	119 35 00	01	--	52-10-03	170	465.00	266	7.8	16.5
13/26E-06N01	46 38 18	119 35 59	01	--	80-04-23	200	482.60	285	7.9	18.7
13/26E-08R01	46 37 23	119 34 52	01	--	81-04-22	120	505.92	383	7.9	17.4
13/26E-10N01	46 37 15	119 33 19	01	--	81-04-23	115	503.33	286	7.9	16.9
13/26E-13R02	46 36 30	119 37 20	01	--	54-04-06	68	420.00	292	8.2	18.0
13/26E-14R01	46 37 04	119 31 30	01	--	78-04-18	125	467.00	272	8.0	17.7
				--	81-04-23	125	467.06	280	8.0	18.0
13/26E-22E01	46 34 24	119 34 37	01	--	80-04-22	185	571.70	294	8.0	17.8
13/26E-26R03	46 35 28	119 31 28	01	--	78-04-17	60	444.00	230	7.9	16.4
				--	81-04-22	60	444.43	235	7.9	16.9
13/26E-28N01	46 36 07	119 33 20	01	--	80-04-22	108	497.80	248	8.2	17.6
13/26E-31K01	46 34 14	119 36 25	01	--	77-04-27	305	688.00	317	7.9	19.3
13/26E-31R01	46 33 51	119 36 09	01	--	79-04-17	320	725.00	420	8.0	20.0
13/26E-34C01	46 34 32	119 32 50	01	112GLCV	74-11-20	149	530.00	601	8.1	--
				112GLCV	76-04-08	149	530.00	580	8.2	17.0
				112GLCV	77-04-27	149	530.00	635	8.2	17.4
				112GLCV	78-04-17	149	530.00	612	9.4	17.6
				112GLCV	79-04-17	149	530.00	600	9.2	18.2
				112GLCV	81-04-22	149	530.12	590	10.0	17.0
				112GLCV	82-04-21	149	530.12	632	8.8	18.3
13/26E-34D01	46 34 25	119 33 09	01	--	76-04-08	168	553.00	927	7.6	16.4
13/26E-35G01	46 34 19	119 31 16	01	--	69-05-08	5661	--	314	8.1	--
				--	69-05-08	5661	--	353	8.9	--
				--	69-05-08	5661	--	344	8.6	--
				--	69-05-10	5661	--	351	8.5	23.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
13/25E-25R01	78-04-18	136	90	41	8.1	14	18	.5	5.9	56
	80-04-22	106	77	34	5.2	11	17	.5	5.5	26
	81-04-22	90	51	28	4.9	9.6	18	.5	4.8	--
13/25E-26N01	81-04-23	144	24	38	12	10	13	.4	3.9	--
13/25E-27C01	80-04-22	132	1	33	12	10	14	.4	4.4	140
13/25E-30G01	51-12-01	91	0	17	9.4	30	41	1.5	9.9	181
	53-09-02	86	0	18	10	30	41	1.4	6.3	190
	54-10-28	91	0	17	9.4	30	42	1.5	7.7	178
	56-10-24	91	0	17	9.3	30	42	1.5	8.2	178
	69-05-14	78	0	17	8.6	30	43	1.5	7.9	178
	70-08-27	77	0	16	8.9	30	43	1.5	8.6	175
	70-09-08	76	0	16	8.8	30	43	1.5	8.3	175
	77-04-27	80	0	17	9.2	29	41	1.4	7.8	170
13/25E-36D01	75-06-11	172	78	44	15	8.7	0	.3	4.2	114
13/26E-02N01	81-04-23	116	16	30	10	22	28	.9	5.5	--
13/26E-05D03	52-10-03	117	0	31	9.7	9.3	14	.4	4.9	144
13/26E-06N01	80-04-23	114	0	32	8.2	14	20	.6	5.5	145
13/26E-08R01	81-04-22	102	0	27	8.3	16	24	.7	5.5	--
13/26E-18N01	81-04-23	102	2	27	8.4	14	22	.6	5.4	--
13/26E-13R02	54-04-06	99	0	23	10	23	32	1.0	6.8	150
13/26E-14R01	78-04-18	103	0	26	9.2	19	27	.8	5.4	140
	81-04-23	94	0	24	8.2	19	29	.9	5.0	--
13/26E-22E01	80-04-22	129	14	32	12	12	16	.5	4.1	160
13/26E-26R03	78-04-17	109	0	29	8.8	4.0	10	.3	4.7	130
	81-04-22	105	0	29	7.9	5.0	9	.2	4.3	--
13/26E-28N01	80-04-22	77	0	20	6.5	27	41	1.4	5.4	140
13/26E-31K01	77-04-27	134	36	32	13	10	14	.4	3.6	120
13/26E-31P01	79-04-17	172	74	41	17	14	15	.5	3.8	120
13/26E-34C01	74-11-20	199	105	55	15	41	30	1.3	7.7	115
	76-04-08	192	99	57	12	39	29	1.3	10	113
	77-04-27	219	137	63	15	43	29	1.3	11	100
	78-04-17	197	130	62	7.7	44	32	1.5	12	90
	79-04-17	177	105	58	7.7	45	34	1.5	13	67
	81-04-22	156	138	44	1.4	41	33	1.5	12	--
	82-04-21	202	162	67	8.3	45	31	1.4	13	--
13/26E-34D01	76-04-08	316	203	85	25	53	24	1.3	9.7	138
13/26E-35G01	69-05-08	17	0	4.7	1.2	60	82	6.6	8.8	148
	69-05-08	7	0	2.2	.3	77	91	13	8.4	147
	69-05-08	6	0	2.1	.3	79	91	14	7.8	199
	69-05-10	7	0	2.2	.3	79	91	14	8.0	205

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
13/25E-25Q01	78-04-18	--	0	--	46	--	85	21	.4	8.8
	80-04-22	--	4.8	--	29	--	83	17	.4	23
	81-04-22	53	--	.0	--	39	46	17	.3	12
13/25E-26N01	81-04-23	148	--	.0	--	120	21	11	.3	42
13/25E-27C01	80-04-22	--	0	--	131	--	19	7.5	.3	44
13/25E-30G01	51-12-01	--	0	--	148	--	1.6	4.8	.6	62
	53-09-02	--	0	--	148	--	2.1	5.2	.7	64
	54-10-28	--	0	--	146	--	2.1	5.1	.6	67
	54-10-24	--	0	--	146	--	.4	4.8	.7	62
	69-05-14	--	0	--	146	--	.0	5.2	.5	58
	70-08-27	--	0	--	144	--	.0	4.4	.7	56
	70-09-08	--	0	--	144	--	.0	4.5	.7	57
	77-04-27	--	0	--	140	--	1.4	4.5	.8	55
13/25E-36D01	75-06-11	--	--	--	94	--	45	11	.3	37
13/26E-02N01	81-04-23	134	--	.0	--	100	45	7.3	.4	28
13/26E-05D03	52-10-03	--	0	--	118	--	16	2.7	.2	34
13/26E-06N01	80-04-23	--	0	--	119	--	18	5.1	.4	39
13/26E-08R01	81-04-22	147	--	.0	--	110	17	5.0	.5	37
13/26E-10N01	81-04-23	133	--	.0	--	100	20	4.2	.8	37
13/26E-13P02	54-04-06	--	0	--	123	--	18	3.0	.5	39
13/26E-14R01	78-04-18	--	0	--	110	--	15	6.3	1.0	37
	81-04-23	142	--	.0	--	110	16	7.2	1.1	38
13/26E-22E01	80-04-22	--	0	--	115	--	22	9.5	.5	35
13/26E-26R03	78-04-17	--	0	--	110	--	12	2.7	.2	23
	81-04-22	96	--	.0	--	95	15	3.0	.2	24
13/26E-28M01	80-04-22	--	0	--	115	--	16	5.9	1.4	44
13/26E-31K01	77-04-27	--	0	--	98	--	24	11	.5	39
13/26E-31R01	79-04-17	--	0	--	98	--	42	20	.4	43
13/26E-34C01	74-11-20	--	0	--	94	--	150	24	.3	36
	76-04-08	--	0	--	93	--	150	23	.5	31
	77-04-27	--	0	--	82	--	190	23	.5	32
	78-04-17	--	5	--	57	--	180	25	.5	29
	79-04-17	--	19	--	72	--	170	28	.4	33
	81-04-22	--	--	--	--	28	210	24	.3	17
	82-04-21	34	--	6.1	--	40	210	22	.4	24
13/26E-34D01	76-04-08	--	0	--	113	--	99	9.2	.9	38
13/26E-35G01	69-05-08	--	0	--	121	--	19	11	.5	23
	69-05-08	--	14	--	160	--	12	7.7	.9	37
	69-05-08	--	10	--	180	--	.0	4.2	1.0	46
	69-05-10	--	7	--	180	--	.4	3.9	1.0	53

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
13/25E-25R01	78-04-18	206	212	.37	--	--	--	--
	80-04-22	197	200	--	--	.58	--	.13
	81-04-22	156	149	--	--	.09	--	.02
13/25E-26N01	81-04-23	232	232	--	--	21	--	4.8
13/25E-27C01	80-04-22	206	211	--	--	2.4	--	.55
13/25E-30G01	51-12-01	213	224	--	.10	--	--	--
	53-09-02	216	225	--	.20	--	--	--
	54-10-28	214	226	--	.80	--	--	--
	56-10-24	207	220	--	.20	--	--	--
	69-05-14	218	215	--	.20	--	--	--
	70-08-27	220	211	--	.00	--	--	--
	70-09-08	216	211	--	.00	--	--	--
	77-04-27	201	209	.00	--	--	--	--
13/25E-36D01	75-06-11	--	266	--	--	44	--	10
13/26E-02N01	81-04-23	214	218	--	--	3.5	--	.78
13/26E-05D03	52-10-03	176	179	--	2.1	--	--	--
13/26E-06N01	80-04-23	184	234	--	--	40	--	9.1
13/26E-08R01	81-04-22	188	190	--	--	1.8	--	.40
13/26E-10N01	81-04-23	181	186	--	--	1.9	--	.42
13/26E-13R02	54-04-06	202	195	--	4.5	--	--	--
13/26E-14R01	78-04-18	171	188	.32	--	--	--	--
	81-04-23	172	190	--	--	1.3	--	.30
13/26E-22E01	80-04-22	182	203	--	--	7.1	--	1.6
13/26E-26R03	78-04-17	139	150	.16	--	--	--	--
	81-04-22	147	137	--	--	.80	--	.18
13/26E-28M01	80-04-22	176	196	--	--	.93	--	.21
13/26E-31K01	77-04-27	208	192	5.1	--	--	--	--
13/26E-31R01	79-04-17	277	260	7.7	--	--	7.7	--
13/26E-34C01	74-11-20	--	399	--	--	12	--	2.8
	78-04-08	396	379	2.8	--	--	--	--
	77-04-27	433	427	3.7	--	--	--	--
	78-04-17	381	400	3.7	--	--	--	--
	79-04-17	405	409	3.6	--	--	3.6	--
	81-04-22	396	404	--	--	4.9	--	1.1
	82-04-21	437	440	--	--	3.9	--	.92
13/26E-34Q01	78-04-08	644	389	61	--	--	--	--
13/26E-35G01	69-05-08	208	201	--	.50	--	--	--
	69-05-08	240	256	--	.20	--	--	--
	69-05-08	252	259	--	.10	--	--	--
	69-05-10	259	263	--	.20	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
13/25E-25R01	78-04-18	--	--	--	--
	80-04-22	--	--	--	--
	81-04-22	--	--	--	--
13/25E-26N01	81-04-23	--	--	--	--
13/25E-27C01	80-04-22	--	--	--	--
13/25E-30G01	51-12-01	20	--	--	--
	53-09-02	80	--	--	--
	54-10-28	40	--	--	--
	56-10-24	60	--	--	--
	69-05-14	90	--	<5	--
	70-08-27	70	--	50	--
	70-09-08	80	--	50	--
	77-04-27	--	120	--	60
13/25E-36D01	75-06-11	--	590	--	--
13/26E-02N01	81-04-23	--	--	--	--
13/26E-05D03	52-10-03	760	--	--	--
13/26E-06N01	80-04-23	--	--	--	--
13/26E-08R01	81-04-22	--	--	--	--
13/26E-10N01	81-04-23	--	--	--	--
13/26E-13R02	54-04-06	50	--	--	--
13/26E-14A01	78-04-18	--	--	--	--
	81-04-23	--	--	--	--
13/26E-22E01	80-04-22	--	--	--	--
13/26E-26B03	78-04-17	--	--	--	--
	81-04-22	--	--	--	--
13/26F-28N01	80-04-22	--	--	--	--
13/26E-31K01	77-04-27	--	<10	--	<10
13/26E-31P01	79-04-17	--	--	--	--
13/26E-34C01	74-11-20	260	650	14	--
	76-04-08	--	20	--	70
	77-04-27	--	<10	--	70
	78-04-17	--	--	--	--
	79-04-17	--	--	--	--
	81-04-22	--	--	--	--
	82-04-21	--	--	--	--
13/26E-34D01	76-04-08	--	120	--	<7
13/26E-35G01	69-05-08	250	--	<10	--
	69-05-08	50	--	<5	--
	69-05-08	100	--	<5	--
	69-05-10	50	--	<5	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
13/28E-35S01	46 34 19	119 31 15	01	--	69-05-19	5661	--	402	8.9	--
				--	69-05-19	5661	--	552	9.3	--
				--	69-05-20	5661	--	580	9.2	26.0
				--	69-05-26	5661	--	664	9.4	26.5
				--	69-05-27	5661	--	773	9.5	--
				--	69-06-10	5661	--	839	9.7	29.0
				--	69-06-11	5661	--	904	10.2	26.5
				--	69-06-12	5661	--	707	9.5	27.5
				--	69-06-22	5661	--	408	8.9	23.0
				--	69-06-28	5661	--	867	9.6	26.3
				--	69-06-29	5661	--	852	9.9	27.0
				--	69-06-29	5661	--	860	9.9	--
				--	69-07-02	5661	--	800	9.7	25.6
				--	69-07-14	5661	--	430	8.9	25.0
				--	69-08-11	5661	--	250	7.5	--
13/27E-07F01	46 37 39	119 28 39	01	--	74-11-19	39	--	704	7.5	14.5
13/27E-07J01	46 37 16	119 28 56	01	--	81-04-22	90	453.70	375	9.6	17.5
13/27E-09D01	46 38 04	119 26 50	01	--	80-04-21	150	400.70	571	7.8	16.7
13/27E-15L02	46 36 45	119 25 24	01	--	81-04-23	110	394.00	515	7.8	16.8
13/27E-16G01	46 36 55	119 26 12	01	112GLCV	56-10-25	84	405.00	447	7.7	14.5
				112GLCV	82-04-20	84	414.29	775	7.8	17.7
13/27E-16M01	46 36 40	119 27 02	01	--	81-04-22	84	434.12	338	7.3	17.5
13/27E-22M01	46 35 50	119 25 41	01	--	80-04-23	58	414.60	312	8.1	18.3
13/27E-28D01	46 34 39	119 26 09	01	--	78-04-19	167	537.00	290	7.8	19.2
13/27E-30N01	46 34 38	119 29 34	01	--	75-06-11	125	467.00	330	7.8	--
				--	80-04-23	125	466.80	212	7.7	16.7
13/27E-31N01	46 33 49	119 29 36	01	--	77-04-28	195	577.00	285	8.0	18.8
13/27E-34P01	46 33 57	119 24 30	01	--	78-04-17	297	522.00	388	8.0	17.2
				--	81-04-22	297	522.02	425	7.8	16.9
13/27E-35R01	46 34 33	119 23 40	01	--	81-04-23	84	424.98	370	7.9	17.2
13/27E-36Q04	46 34 24	119 22 34	01	112SCRD	74-11-19	84	--	321	7.9	17.5
13/28E-31P01	46 33 55	119 20 40	01	112GLCV	82-04-20	48	--	410	7.8	17.7
14/24E-14W03	46 42 00	119 31 55	01	--	78-04-18	80	449.00	320	7.8	32.5
14/24E-23D01	46 41 35	119 32 00	01	--	79-04-18	91	470.00	335	7.7	24.2
14/24E-24F02	46 41 09	119 30 16	01	--	81-04-22	43	427.15	345	7.4	16.5
14/24E-25N01	46 40 03	119 30 44	01	--	80-04-21	150	435.30	326	8.1	17.1
14/24E-27R01	46 40 41	119 32 42	01	--	79-04-18	83	459.00	265	8.0	16.9
14/24E-28R01	46 40 24	119 34 00	01	--	77-04-27	80	458.00	194	7.9	20.7
14/24E-32L03	46 39 17	119 35 30	01	--	79-04-18	51	422.00	235	8.1	22.2
14/24E-33N01	46 39 16	119 34 22	01	--	80-04-21	150	469.90	322	8.1	16.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
13/26E-35G01	69-05-19	6	0	1.7	.4	90	91	17	9.9	205
	69-05-19	6	0	1.7	.4	114	91	21	14	134
	69-05-20	7	0	2.0	.4	124	93	22	9.6	133
	69-05-26	6	0	2.4	.1	142	94	26	10	98
	69-05-27	4	0	.9	.4	164	96	37	10	55
	69-06-10	13	0	5.0	.1	163	92	21	15	32
	69-06-11	15	0	5.8	.1	177	93	21	12	92
	69-06-12	7	0	2.5	.1	141	94	25	11	72
	69-06-22	4	0	1.2	.2	87	93	20	8.0	181
	69-06-28	2	0	.8	.0	182	98	59	3.3	49
	69-06-29	2	0	.6	.1	176	98	58	5.9	2
	69-06-29	2	--	.7	.1	191	98	56	3.9	--
	69-07-02	1	0	.2	.1	166	98	78	4.7	48
	69-07-14	0	0	.2	.0	134	99	87	3.0	164
	69-08-11	58	6	17	3.7	50	65	3.0	1.2	63
13/27E-07K01	74-11-19	216	0	72	8.8	64	37	2.0	13	314
13/27E-07P01	81-04-22	29	0	9.3	1.3	61	91	5.2	1.3	--
13/27E-09D01	80-04-21	197	0	56	14	39	29	1.3	6.2	240
13/27E-15L02	81-04-23	213	73	64	13	24	19	.7	5.2	--
13/27E-16G01	56-10-25	275	79	77	20	34	21	.9	6.6	239
	82-04-20	314	164	91	21	48	24	1.2	7.1	--
13/27E-16M01	81-04-22	123	3	36	8.1	20	26	.8	5.2	--
13/27E-22M01	80-04-23	89	0	24	7.1	31	41	1.5	6.6	140
13/27E-28Q01	78-04-19	123	0	31	11	22	27	.9	4.2	160
13/27E-30N01	75-06-11	127	21	31	12	18	23	.7	5.9	129
	80-04-23	50	18	17	4.2	16	35	.9	4.6	51
13/27E-31N01	77-04-28	108	0	25	11	18	24	.8	4.5	120
13/27E-34P01	78-04-17	156	46	40	16	21	21	.7	4.9	150
	81-04-22	153	53	42	14	21	21	.7	4.7	--
13/27E-35B01	81-04-23	159	49	44	12	13	15	.5	5.7	--
13/27E-36G04	74-11-19	107	0	31	7.1	25	32	1.1	5.4	159
13/28E-31P01	82-04-20	155	45	43	14	22	22	.8	4.7	--
14/26E-14W03	78-04-18	143	73	46	6.9	5.2	7	.2	5.0	85
14/26E-23D01	79-04-18	132	42	39	8.4	12	16	.5	4.1	110
14/26E-24F02	81-04-22	133	0	35	11	16	20	.6	5.7	--
14/26E-25N01	80-04-21	123	8	31	11	18	23	.7	4.4	140
14/26E-27B01	79-04-18	104	6	26	9.6	16	24	.7	3.5	120
14/26E-28G01	77-04-27	87	25	27	4.6	2.9	7	.1	2.4	75
14/26E-32L03	79-04-18	103	32	34	4.3	3.4	7	.2	1.9	87
14/26E-33N01	80-04-21	127	12	35	9.6	15	20	.6	5.1	140

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
13/26E-35G01	69-05-19	--	14	--	191	--	.0	13	1.7	55
	69-05-19	--	43	--	182	--	1.6	49	7.5	57
	69-05-20	--	35	--	167	--	.0	48	10	73
	69-05-26	--	54	--	170	--	1.8	85	13	79
	69-05-27	--	67	--	157	--	2.0	120	16	89
	69-06-10	--	86	--	169	--	12	110	20	81
	69-06-11	--	0	--	75	--	10	120	20	90
	69-06-12	--	67	--	171	--	5.6	83	15	81
	69-06-22	--	18	--	178	--	3.6	13	2.0	48
	69-06-28	--	101	--	208	--	13	98	21	116
	69-06-29	--	120	--	201	--	10	98	20	105
	69-06-29	--	125	--	--	--	12	94	20	120
	69-07-02	--	75	--	181	--	14	90	18	63
	69-07-14	--	16	--	161	--	21	58	11	67
	69-08-11	--	0	--	52	--	39	3.0	.8	4.0
13/27E-07K01	74-11-19	--	0	--	258	--	64	14	.1	23
13/27E-07P01	81-04-22	4.2	--	16	--	34	100	21	.3	8.8
13/27E-09D01	80-04-21	--	0	--	197	--	57	16	.5	32
13/27E-15L02	81-04-23	185	--	.0	--	140	80	11	.3	36
13/27E-16G01	56-10-25	--	0	--	196	--	113	22	.3	36
	82-04-20	183	--	.0	--	150	190	30	.2	37
13/27E-16H01	81-04-22	165	--	.0	--	120	31	5.3	.4	37
13/27E-22N01	80-04-23	--	0	--	131	--	24	6.1	.6	42
13/27E-28J01	78-04-19	--	0	--	130	--	28	8.4	.6	37
13/27E-30N01	75-06-11	--	--	--	106	--	39	11	.5	44
	80-04-23	--	0	--	42	--	39	12	.5	14
13/27E-31N01	77-04-28	--	0	--	98	--	29	3.8	.6	47
13/27E-34P01	78-04-17	--	0	--	120	--	54	12	.5	33
	81-04-22	148	--	.0	--	110	61	17	.5	37
13/27E-35R01	81-04-23	145	--	.0	--	110	52	11	.2	20
13/27E-36G04	74-11-19	--	0	--	138	--	20	3.1	.4	37
13/28E-31P01	82-04-20	145	--	.0	--	120	52	12	.4	40
14/26E-14W03	78-04-18	--	0	--	70	--	51	11	.2	39
14/26E-23D01	79-04-18	--	0	--	90	--	46	16	.2	40
14/26E-24F02	81-04-22	187	--	.0	--	140	23	3.7	.6	37
14/26E-25N01	80-04-21	--	0	--	115	--	46	4.3	.5	32
14/26E-27R01	79-04-18	--	0	--	98	--	25	3.8	.4	39
14/26E-28G01	77-04-27	--	0	--	62	--	16	2.5	.1	17
14/26E-32L03	79-04-18	--	0	--	71	--	42	2.6	.2	14
14/26E-33N01	80-04-21	--	0	--	115	--	47	4.3	.5	31

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
13/26E-35B01	69-05-19	293	301	--	.20	--	--	--
	69-05-19	366	399	--	.30	--	--	--
	69-05-20	389	424	--	.20	--	--	--
	69-05-26	451	492	--	.00	--	--	--
	69-05-27	518	567	--	.10	--	--	--
	69-06-10	516	597	--	.30	--	--	--
	69-06-11	554	481	--	.20	--	--	--
	69-06-12	438	511	--	.10	--	--	--
	69-06-22	274	289	--	.30	--	--	--
	69-06-28	565	664	--	.20	--	--	--
	69-06-29	542	661	--	.20	--	--	--
	69-06-29	566	--	--	.20	--	--	--
	69-07-02	476	543	--	.30	--	--	--
	69-07-14	418	418	--	.40	--	--	--
	69-08-11	746	158	--	1.1	--	--	--
13/27E-07K01	74-11-19	--	429	--	--	15	--	3.4
13/27E-07P01	81-04-22	221	230	--	--	.04	--	.01
13/27E-09D01	80-04-21	375	366	--	--	27	--	6.1
13/27E-15L02	81-04-23	345	344	--	--	19	--	4.3
13/27E-16B01	56-10-25	431	426	--	6.8	--	--	--
	82-04-20	542	515	--	--	--	--	6.8
13/27E-16M01	81-04-22	223	230	--	--	6.2	--	1.4
13/27E-22M01	80-04-23	207	224	--	--	3.3	--	.74
13/27E-28Q01	78-04-19	203	221	.72	--	--	--	--
13/27E-30N01	74-06-11	--	229	--	--	3.1	--	.71
	80-04-23	125	133	--	--	.09	--	.02
13/27E-31N01	77-04-28	200	198	3.3	--	--	--	--
13/27E-34R01	78-04-17	243	255	2.8	--	--	--	--
	81-04-22	280	287	--	--	17	--	3.8
13/27E-35R01	81-04-23	231	233	--	--	3.5	--	.81
13/27E-36B04	74-11-19	--	216	--	--	4.2	--	.95
13/28E-31R01	82-04-20	277	259	--	--	--	--	6.7
14/26E-14N03	78-04-18	210	206	3.3	--	--	--	--
14/26E-23D01	79-04-18	216	220	3.7	--	--	3.7	--
14/26E-24F02	81-04-22	220	228	--	--	2.5	--	.57
14/26E-25N01	80-04-21	227	221	--	--	4.9	--	1.1
14/26E-27R01	79-04-18	188	182	2.9	--	--	2.9	--
14/26E-28G01	77-04-27	121	110	4.9	--	--	--	--
14/26E-32L03	79-04-18	138	145	1.2	--	--	1.2	--
14/26E-33N01	80-04-21	227	221	--	--	4.0	--	.90

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
13/26E-35G01	69-05-19	1400	--	<5	--
	69-05-19	570	--	<5	--
	69-05-20	50	--	<5	--
	69-05-26	<10	--	<5	--
	69-05-27	30	--	<5	--
	69-06-10	200	--	<5	--
	69-06-11	<10	--	<5	--
	69-06-12	<10	--	<5	--
	69-06-22	1000	--	<5	--
	69-06-28	100	--	<5	--
	69-06-29	650	--	<5	--
	69-06-29	150	--	<5	--
	69-07-02	1800	--	<5	--
	69-07-14	2100	--	<5	--
	69-08-11	50	--	<5	--
13/27E-07K01	74-11-19	340	240	250	--
13/27E-07P01	81-04-22	--	--	--	--
13/27E-09D01	80-04-21	--	--	--	--
13/27E-15L02	81-04-23	--	--	--	--
13/27E-16G01	56-10-25	50	--	--	--
	82-04-20	--	--	--	--
13/27E-16M01	81-04-22	--	--	--	--
13/27E-22M01	80-04-23	--	--	--	--
13/27E-28Q01	78-04-19	--	--	--	--
13/27E-30N01	75-06-11	--	970	--	--
	80-04-23	--	--	--	--
13/27E-31N01	77-04-28	--	<10	--	40
13/27E-34R01	78-04-17	--	--	--	--
	81-04-22	--	--	--	--
13/27E-35R01	81-04-23	--	--	--	--
13/27E-36G04	74-11-19	<10	<10	<1	--
13/28E-31R01	82-04-20	--	--	--	--
14/26E-14M03	78-04-18	--	--	--	--
14/26E-23D01	79-04-18	--	--	--	--
14/26E-24F02	81-04-22	--	--	--	--
14/26E-25N01	80-04-21	--	--	--	--
14/26E-27R01	79-04-18	--	--	--	--
14/26E-28G01	77-04-27	--	30	--	<10
14/26E-32L03	79-04-18	--	--	--	--
14/26E-33N01	80-04-21	--	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
14/26E-34D01	46 39 45	119 33 20	01	112GLCV	82-04-21	150	439.55	214	8.0	16.6
14/27E-18H02	46 42 11	119 29 35	01	--	79-04-18	55	410.00	3500	7.9	22.4
14/27E-32N02	46 39 01	119 28 07	01	--	80-04-21	150	412.30	830	7.8	16.6
14/27E-33G01	46 39 28	119 25 14	01	--	79-04-17	67	407.00	228	7.8	20.6

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE FET-FLD (MG/L AS HCO3)
14/26E-34D01	82-04-21	103	7	28	7.4	4.0	8	.2	2.6	--
14/27E-18H02	79-04-18	156	0	50	7.5	700	90	25	10	240
14/27E-32N02	80-04-21	252	22	68	28	69	37	2.0	7.1	280
14/27E-33G01	79-04-17	103	5	34	4.5	4.4	8	.2	2.7	120

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
14/26E-34D01	82-04-21	118	--	.0	--	96	15	1.3	.1	16
14/27E-18H02	79-04-18	--	0	--	197	--	160	8.8	.3	29
14/27E-32N02	80-04-21	--	0	--	230	--	44	13	.7	34
14/27E-33G01	79-04-17	--	0	--	98	--	14	2.6	.1	26

LOCAL IDENTIFIER	DATE OF SAMPLE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
14/26E-34D01	82-04-21	129	133	--	--	--	--	.38
14/27E-18H02	79-04-18	2700	1084	380	--	--	380	--
14/27E-32N02	80-04-21	584	552	--	--	159	--	36
14/27E-33G01	79-04-17	145	147	.91	--	--	.91	--

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
14/26E-34D01	82-04-21	--	--	--	--
14/27E-18H02	79-04-18	--	--	--	--
14/27E-32N02	80-04-21	--	--	--	--
14/27E-33G01	79-04-17	--	--	--	--

BLE 2.--Continued

KLICKITAT

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
03/10E-13N01	45 44 24	121 30 09	01	--	71-10-13	543	610.00	143	7.5	9.5
03/11E-05N03	45 46 04	121 27 42	01	122GRND	82-07-14	420	1640.00	175	7.5	12.7
03/11E-30F01	45 43 07	121 29 40	01	--	59-10-29	265	--	145	7.9	17.0
03/12E-16Q01	45 44 26	121 18 27	01	122WNPW	82-07-14	235	1220.00	253	7.3	15.4
03/12E-27N01	45 42 43	121 17 50	01	--	71-10-13	110	560.00	174	7.7	14.0
04/13E-24H01	45 49 14	121 06 58	01	121CRRV	64-10-21	295	--	1410	6.6	27.2
04/14E-19C01	45 49 25	121 06 19	01	--	64-10-21	--	--	429	6.4	22.8
05/11E-15D01S	45 55 38	121 25 16	01	121YKIM	74-05-06	--	2200.00	192	--	9.0
05/11E-16J01S	45 55 06	121 25 46	01	121YKIM	74-05-03	--	2360.00	51	--	7.6
05/12E-04H01	45 57 05	121 18 07	01	121YKIM	74-07-17	225	1830.00	195	--	12.1
05/12E-04H02	45 57 05	121 18 08	01	110ALVM	74-07-17	19	1830.00	68	--	12.3
05/12E-08H01S	45 56 15	121 19 34	01	121YKIM	74-04-25	--	1870.00	152	--	9.5
06/12E-02D01	46 02 35	121 15 43	01	110RSLT	74-07-11	131	1970.00	50	--	6.8
06/12E-03H01	46 02 05	121 17 56	01	110ALVM	74-07-11	50	1981.00	82	--	11.0
06/12E-07A01S	46 01 39	121 20 41	01	110RSLT	74-07-16	--	2080.00	55	--	7.4
06/12E-10H01	46 01 23	121 17 56	01	110RSLT	74-07-11	388	1935.00	62	--	6.1
06/12E-11E02	46 01 30	121 15 34	01	110ALVM	74-07-16	13	1905.00	75	--	10.0
06/12E-30A01S	45 58 58	121 20 37	01	110RSLT	74-04-04	--	1830.00	55	--	6.8
06/12E-32E01S	45 57 54	121 20 26	01	110RSLT	74-04-04	--	1825.00	67	--	7.0
06/12E-35H01	45 57 57	121 15 45	01	121YKIM	74-07-18	104	1875.00	110	--	9.2
06/13E-03E01S	46 02 17	121 10 29	01	110RSLT	74-02-12	--	1325.00	97	--	9.1
06/13E-03Q01S	46 01 47	121 09 52	01	110RSLT	74-09-04	--	1200.00	78	--	7.4
06/13E-04H01S	46 02 20	121 10 43	01	110RSLT	74-10-10	--	1215.00	1660	--	21.8
06/13E-10R01S	46 01 03	121 09 27	01	110RSLT	73-12-04	--	1330.00	94	--	6.0
				110RSLT	74-02-06	--	1330.00	76	--	6.6
				110RSLT	74-05-07	--	1330.00	79	--	7.7
				110RSLT	74-09-04	--	1330.00	80	--	7.7
06/13E-10R02S	46 00 54	121 09 35	01	110RSLT	74-05-07	--	1290.00	77	--	7.9
06/13E-10R03S	46 00 58	121 09 36	01	110RSLT	74-05-07	--	1440.00	83	--	8.0
06/13E-15A01S	46 00 51	121 09 27	01	110RSLT	74-05-07	--	1220.00	85	--	7.9
07/12E-04M01S	46 07 18	121 19 09	01	110RSLT	74-06-10	--	3139.99	60	--	8.0
07/12E-28A01S	46 04 20	121 19 19	01	110RSLT	74-04-03	--	2355.00	46	--	5.4
07/13E-33D01S	46 02 54	121 10 48	01	110RSLT	74-04-24	--	1585.00	86	--	8.6
08/12E-15G01S	46 11 03	121 17 19	01	110RSLT	74-06-13	--	2715.00	60	--	4.8
08/12E-27L01S	46 09 04	121 17 34	01	110RSLT	74-07-15	--	2540.00	60	--	6.3
09/12E-35R01S	46 13 45	121 15 37	01	110RSLT	74-06-13	--	2730.00	64	--	6.3
09/13E-1AP01S	46 15 32	121 14 35	01	110RSLT	74-09-12	--	2700.00	1900	--	12.2
10/11E-19L01S	46 20 09	121 29 30	01	110RSLT	74-07-15	--	4740.99	20	--	2.9
11/12E-24L01S	46 25 27	121 15 49	01	--	74-08-15	--	3539.99	1500	--	9.5
11/13E-03E01S	46 28 12	121 10 57	01	121YKIM	74-09-05	--	4879.99	68	--	4.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
03/10E-13N01	71-10-13	--	57	0	12	6.6	6.2	19	.4	1.5
03/11E-05N03	82-07-14	<1	185	0	33	25	9.8	10	.3	4.6
03/11E-30F01	59-10-29	--	65	0	16	6.1	11	26	.6	3.0
03/12E-16Q01	82-07-14	<1	119	0	23	15	7.1	11	.3	3.1
03/12E-27N01	71-10-13	--	74	8	17	7.7	6.3	15	.3	1.4
04/13E-24H01	64-10-21	--	753	0	120	110	63	15	1.0	10
04/14E-19C01	64-10-21	--	170	0	27	25	30	27	1.0	4.3
05/11E-15D01S	74-05-06	--	105	4	27	9.2	5.4	0	.2	1.3
05/11E-16J01S	74-05-03	--	21	0	5.6	1.6	3.1	24	.3	.6
05/12E-04H01	74-07-17	--	124	22	33	10	8.5	12	.3	4.7
05/12E-04H02	74-07-17	--	23	0	5.1	2.6	3.2	21	.3	2.0
05/12E-09H01S	74-04-25	--	68	0	15	7.4	6.1	16	.3	2.1
06/12E-02D01	74-07-11	--	22	0	5.2	2.2	2.7	20	.3	.9
06/12E-03W01	74-07-11	--	30	0	7.6	2.7	3.2	18	.3	1.6
06/12E-07A01S	74-07-16	--	20	0	4.2	2.2	2.6	20	.3	1.9
06/12E-10W01	74-07-11	--	23	0	5.2	2.5	3.6	23	.3	2.0
06/12E-11E02	74-07-16	--	28	0	7.9	2.1	2.8	16	.2	2.2
06/12E-30A01S	74-04-04	--	19	0	3.6	2.5	2.8	22	.3	1.9
06/12E-32E01S	74-04-04	--	24	0	4.5	3.0	3.4	22	.3	2.5
06/12E-35H01	74-07-18	--	47	0	11	4.8	4.2	16	.3	2.0
06/13E-03E01S	74-02-12	--	41	0	8.9	4.5	4.2	18	.3	1.1
06/13E-03Q01S	74-09-04	--	26	0	5.8	2.7	3.9	23	.3	1.8
06/13E-04H01S	74-10-10	--	666	0	110	95	160	34	2.8	16
06/13E-10R01S	73-12-04	--	27	0	5.9	2.9	4.0	23	.3	2.1
	74-02-06	--	27	0	5.4	3.2	4.0	23	.3	2.1
	74-05-07	--	28	0	6.1	3.2	3.8	21	.3	2.1
	74-09-04	--	27	0	6.1	2.8	4.9	26	.4	2.5
06/13E-10R02S	74-05-07	--	34	0	7.9	3.5	3.9	19	.3	1.4
06/13E-10R03S	74-05-07	--	45	6	12	3.6	4.2	16	.3	1.3
06/13E-15A01S	74-05-07	--	30	0	6.3	3.4	3.8	21	.3	1.3
07/12E-04M01S	74-06-10	--	25	0	6.7	2.0	2.9	20	.3	.5
07/12E-28A01S	74-04-03	--	17	0	4.3	1.6	2.9	25	.3	1.5
07/13E-33Q01S	74-04-24	--	41	0	10	4.0	4.0	17	.3	.4
08/12E-15G01S	74-06-13	--	22	0	5.3	2.2	3.0	22	.3	.7
08/12E-27L01S	74-07-15	--	19	0	5.7	1.1	2.8	22	.3	2.4
09/12E-35R01S	74-04-13	--	24	0	5.5	2.4	3.6	24	.3	.9
09/13E-18P01S	74-09-12	--	596	0	97	86	150	35	2.7	16
10/11E-19L01S	74-07-15	--	8	0	2.1	.6	.8	17	.1	.6
11/12E-24L01S	74-08-15	--	621	0	120	78	130	31	2.3	2.2
11/13E-03E01S	74-09-05	--	20	0	5.3	1.7	3.1	22	.3	2.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
03/10E-13N01	71-10-13	82	--	0	--	67	--	.0	2.7	.1
03/11E-05N03	82-07-14	--	253	--	.0	--	212	<5.0	2.6	.2
03/11E-30F01	59-10-29	107	--	0	--	88	--	.7	4.8	.2
03/12E-16J01	82-07-14	--	164	--	.0	--	135	5.0	1.7	<.1
03/12E-27N01	71-10-13	80	--	0	--	66	--	4.5	2.8	.2
04/13E-24H01	64-10-21	1050	--	0	--	869	--	3.4	3.5	.4
04/14E-19C01	64-10-21	284	--	0	--	233	--	.0	3.2	1.1
05/11E-15D01S	74-05-06	123	--	--	--	101	--	1.3	1.1	<.1
05/11E-16J01S	74-05-03	30	--	--	--	25	--	1.3	1.1	<.1
05/12E-04H01	74-07-17	124	--	--	--	102	--	2.0	1.0	.2
05/12E-04H02	74-07-17	36	--	--	--	30	--	1.5	1.5	.1
05/12E-08H01S	74-04-25	95	--	--	--	78	--	1.4	1.5	<.1
06/12E-02D01	74-07-11	32	--	--	--	26	--	<1.0	.7	<.1
06/12E-03H01	74-07-11	50	--	--	--	41	--	2.0	1.0	<.1
06/12E-07A01S	74-07-16	33	--	--	--	27	--	.1	.5	.1
06/12E-18H01	74-07-11	39	--	--	--	32	--	.3	.5	.1
06/12E-11E02	74-07-16	44	--	--	--	36	--	1.5	.8	.1
06/12E-30A01S	74-04-04	30	--	--	--	25	--	.1	.5	<.1
06/12E-32E01S	74-04-04	38	--	--	--	31	--	1.1	.3	<.1
06/12E-35H01	74-07-18	64	--	--	--	52	--	1.5	1.4	.1
06/13E-03E01S	74-02-12	59	--	--	--	48	--	1.1	.2	.1
06/13E-03Q01S	74-09-04	45	--	--	--	37	--	.6	1.0	.1
06/13E-04M01S	74-10-10	1130	--	--	--	928	--	2.6	49	.4
06/13E-10R01S	73-12-04	45	--	--	--	37	--	1.1	.7	--
	74-02-06	45	--	--	--	37	--	1.6	1.1	--
	74-05-07	46	--	--	--	38	--	1.3	.9	.1
	74-09-04	47	--	--	--	39	--	.6	1.0	.1
06/13E-10R02S	74-05-07	48	--	--	--	39	--	1.1	1.1	<.1
06/13E-10R03S	74-05-07	48	--	--	--	39	--	1.1	1.1	<.1
06/13E-15A01S	74-05-07	47	--	--	--	39	--	1.1	1.0	<.1
07/12E-04M01S	74-06-10	38	--	--	--	31	--	.9	.7	<.1
07/12E-29A01S	74-04-03	26	--	--	--	21	--	.9	.2	<.1
07/13E-33Q01S	74-04-24	54	--	--	--	44	--	.8	1.0	<.1
08/12E-15G01S	74-04-13	36	--	--	--	30	--	.9	.8	<.1
08/12E-27L01S	74-07-15	38	--	--	--	31	--	.3	.5	.1
09/12E-35R01S	74-06-13	39	--	--	--	32	--	1.8	.9	<.1
09/13E-18P01S	74-09-12	951	--	--	--	780	--	2.2	92	.3
10/11E-19L01S	74-07-15	18	--	--	--	8.0	--	1.5	.7	.1
11/12E-24L01S	74-08-15	806	--	--	--	661	--	2.6	150	.2
11/13E-03F01S	74-09-05	38	--	--	--	31	--	.6	1.0	.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
03/10E-13N01	71-10-13	38	140	109	--	.84	--
03/11E-05N03	82-07-14	56	--	264	--	--	.23
03/11E-30F01	59-10-20	57	158	151	.00	--	--
03/12E-16Q01	82-07-14	58	--	194	--	--	.76
03/12E-27N01	71-10-13	58	180	137	--	2.2	--
04/13E-24H01	64-10-21	121	964	953	.30	--	--
04/14E-19C01	64-10-21	89	325	319	.20	--	--
05/11E-15D01S	74-05-06	--	--	--	--	--	--
05/11E-16J01S	74-05-03	--	--	--	--	--	--
05/12E-04H01	74-07-17	--	--	--	--	.19	--
05/12E-04H02	74-07-17	--	--	--	--	.07	--
05/12E-08H01S	74-04-25	--	--	--	--	--	--
06/12E-02D01	74-07-11	--	--	--	--	.01	--
06/12E-03M01	74-07-11	--	--	--	--	.09	--
06/12E-07A01S	74-07-16	--	--	--	--	.08	--
06/12E-10M01	74-07-11	--	--	--	--	.05	--
06/12E-11E02	74-07-16	--	--	--	--	.04	--
06/12E-30A01S	74-04-04	--	--	--	--	2.8	--
06/12E-32E01S	74-04-04	--	--	--	--	.17	--
06/12E-35H01	74-07-18	--	--	--	--	.45	--
06/13E-03F01S	74-02-12	--	--	--	--	.05	--
06/13E-03Q01S	74-09-04	--	--	--	--	.13	--
06/13E-04H01S	74-10-10	--	--	--	--	.49	--
06/13E-10R01S	73-12-04	35	--	74	--	.11	--
	74-02-06	34	--	76	--	.11	--
	74-05-07	--	--	--	--	--	--
	74-09-04	--	--	--	--	.16	--
06/13E-10R02S	74-05-07	--	--	--	--	--	--
06/13E-10R03S	74-05-07	--	--	--	--	--	--
06/13E-15A01S	74-05-07	--	--	--	--	--	--
07/12E-04M01S	74-06-10	--	--	--	--	--	--
07/12E-28A01S	74-04-03	--	--	--	--	.22	--
07/13E-33Q01S	74-04-24	--	--	--	--	--	--
08/12E-15G01S	74-06-13	--	--	--	--	--	--
08/12E-27L01S	74-07-15	--	--	--	--	.06	--
09/12E-35R01S	74-06-13	--	--	--	--	--	--
09/13E-18P01S	74-09-12	--	--	--	--	.01	--
10/11E-19L01S	74-07-15	--	--	--	--	.05	--
11/12E-24L01S	74-08-15	--	--	--	--	<.10	--
11/13E-03E01S	74-09-05	--	--	--	--	.17	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
03/10E-13N01	71-10-13	1700	--	<20	--
03/11E-05N03	82-07-14	--	17	--	3
03/11E-30F01	59-10-29	100	--	--	--
03/12E-16Q01	82-07-14	--	17	--	3
03/12E-27N01	71-10-13	140	--	<20	--
04/13E-24H01	64-10-21	11000	--	200	--
04/14E-19C01	64-10-21	2800	--	100	--
05/11E-15D01S	74-05-06	--	120	--	<10
05/11E-16J01S	74-05-03	--	410	--	<10
05/12E-04H01	74-07-17	--	80	--	170
05/12E-04H02	74-07-17	--	330	--	<10
05/12E-08H01S	74-04-25	--	390	--	<10
06/12E-02D01	74-07-11	--	2100	--	<10
06/12E-03N01	74-07-11	--	70	--	<10
06/12E-07A01S	74-07-16	--	20	--	<10
06/12E-10M01	74-07-11	--	220	--	<10
06/12E-11E02	74-07-16	--	110	--	<10
06/12E-30A01S	74-04-04	--	120	--	<10
06/12E-32E01S	74-04-04	--	<10	--	<10
06/12E-35H01	74-07-18	--	500	--	<10
06/13E-03E01S	74-02-12	--	50	--	<10
06/13E-03Q01S	74-09-04	--	50	--	<10
06/13E-04H01S	74-10-10	--	2200	--	60
06/13E-10P01S	73-12-04	--	--	--	--
	74-02-06	--	--	--	--
	74-05-07	--	--	--	--
	74-09-04	--	250	--	<10
06/13E-10P02S	74-05-07	--	20	--	<10
06/13E-10P03S	74-05-07	--	20	--	<10
06/13E-15A01S	74-05-07	--	20	--	<10
07/12E-04M01S	74-06-10	--	30	--	<10
07/12E-28A01S	74-04-03	--	30	--	<10
07/13E-33Q01S	74-04-24	--	70	--	<10
08/12E-15G01S	74-06-13	--	20	--	<10
08/12E-27L01S	74-07-15	--	120	--	<10
09/12E-35R01S	74-06-13	--	120	--	<10
09/13E-18P01S	74-09-12	--	23000	--	760
10/11E-19L01S	74-07-15	--	40	--	<10
11/12E-24L01S	74-08-15	--	19000	--	370
11/13E-03E01S	74-09-05	--	110	--	<10

TABLE 2.--Continued

LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)
11/13E-04K01S	46 28 01	121 11 50	01	110ALVM	74-09-05	--	4710.90	440	--	13.8

LOCAL IDENT-I-FIER	DATE OF SAMPLE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
11/13E-04K01S	74-09-05	--	8	0	2.7	.4	100	94	16	3.5

LOCAL IDENT-I-FIER	DATE OF SAMPLE	BICAR-BONATE FET-FLD (MG/L AS HCO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	CAR-BONATE IT-FLD (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
11/13E-04K01S	74-09-05	279	--	--	--	229	--	.8	1.0	.5

LOCAL IDENT-I-FIER	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS NO3)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
11/13E-04K01S	74-09-05	--	--	--	--	.10	--

LOCAL IDENT-I-FIER	DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
11/13E-04K01S	74-09-05	--	70	--	<10

TABLE 2.--Continued

HORSE HEAVEN HILLS

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
02/13E-21E01S	45 38 48	121 11 31	01	--	30-07-29	--	--	--	--	14.0
02/13E-33R01	45 36 33	121 10 40	01	--	30-07-29	149	--	--	--	15.5
02/15E-17W03	45 39 25	120 58 04	03	--	71-10-13	475	172.00	333	8.1	18.1
03/15E-11N01	45 45 10	120 54 06	01	122WNPM	82-07-14	100	1600.00	220	7.6	13.2
03/15E-21B01	45 44 05	120 49 39	01	--	60-06-28	70	--	183	7.9	12.0
03/21E-17L01	45 44 31	120 12 41	01	--	66-05-19	--	--	447	8.1	--
03/21E-17L02	45 44 30	120 12 41	01	--	66-04-12	192	--	435	8.9	16.7
03/21E-17M01	45 44 27	120 13 07	01	--	66-05-19	--	--	435	7.6	--
04/15E-15G01	45 50 02	120 54 40	01	122WNPM	82-07-14	295	1640.00	990	7.5	17.2
04/16E-03L01	45 51 35	120 47 28	01	--	71-02-15	319	1940.00	283	7.2	14.0
04/16E-20A01	45 49 24	120 49 30	01	--	60-05-19	200	--	271	7.5	13.0
04/16E-32A01	45 47 41	120 49 22	01	122WNPM	82-07-13	102	1720.00	152	7.6	14.6
05/20E-28R01	45 53 41	120 18 43	01	122WNPM	82-04-01	330	2500.00	208	7.9	13.0
05/23E-03A01	45 57 00	119 54 30	01	--	61-05-05	81	--	464	7.9	16.0
05/23E-13R02	45 54 44	119 52 05	02	122WNPM	82-03-31	1446	580.00	335	8.7	24.9
05/23E-30D01	45 53 41	119 59 27	01	122WNPM	82-03-29	843	900.00	325	8.1	23.6
05/24E-28G01	45 53 16	119 49 44	01	122SDLM	82-03-29	264	500.00	565	7.8	17.1
05/24E-35R01	45 52 06	119 45 53	01	122WNPM	82-03-29	398	270.00	620	7.9	15.4
05/26E-05N02	45 56 28	119 36 00	02	122WNPM	82-03-30	525	435.00	465	8.8	18.8
05/27E-04C01	45 59 05	119 26 47	01	122WNPM	82-03-30	298	410.00	570	7.7	18.1
05/28E-05D01	45 57 03	119 20 51	01	--	71-10-18	455	--	522	7.9	19.5
05/28E-06R01	45 56 22	119 21 12	01	--	71-09-24	556	--	498	8.2	21.5
05/28E-06R02	45 56 24	119 21 11	01	122WNPM	82-03-30	450	310.00	475	8.6	16.2
06/20E-30P01	45 58 15	120 21 18	01	122SDLM	82-04-01	120	3090.00	170	7.1	11.5
06/23E-11N01	46 00 45	119 52 21	01	--	70-10-21	892	--	348	8.1	22.0
06/23E-11P01	46 00 45	119 53 55	01	--	70-12-11	892	--	348	8.1	20.0
				--	70-10-21	892	--	348	8.1	22.0
				--	70-12-11	892	--	348	8.1	20.0
06/23E-11Q01	46 01 43	119 53 41	01	--	82-04-30	670	--	344	8.1	21.1
06/23E-15M01	46 00 13	119 54 30	01	--	70-10-22	633	--	345	7.9	21.0
06/23E-15J01	46 00 09	119 54 35	01	--	70-10-22	633	--	345	7.9	21.0
06/23E-24R01	45 59 38	119 52 23	01	122WNPM	82-03-29	965	870.00	333	8.3	20.5
06/25E-19K01	45 59 32	119 36 36	01	122SDLM	82-03-31	345	650.00	1010	7.7	17.9
06/29E-08M01	46 01 06	119 13 21	01	--	71-10-19	146	--	1090	7.6	15.0
07/22E-09E01	46 06 32	120 04 16	01	122WNPM	82-03-29	297	1985.00	385	7.4	14.7
07/22E-36N01	46 03 04	119 59 25	01	122SDLM	82-03-29	304	1725.00	275	7.7	15.5
07/23E-36R01	46 02 32	119 51 57	01	122WNPM	82-03-31	805	930.00	330	8.3	18.8
07/24E-26R01	46 04 04	119 46 35	01	122SDLM	82-03-31	532	870.00	290	7.8	19.4
07/25E-12R01	46 06 12	119 37 20	01	122SDLM	82-03-30	446	958.00	450	8.1	18.3
07/25E-36N04	46 02 37	119 38 30	04	121YKIM	72-08-03	860	--	448	8.2	21.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
02/13E-21E01S	30-07-29	--	100	5	22	11	7.8	14	.3	2.1
02/13E-33P01	30-07-28	--	84	0	20	8.3	22	35	1.1	4.5
02/15E-17M03	71-10-13	--	103	0	23	11	32	39	1.4	4.5
03/15E-11N01	82-07-14	<1	81	0	19	8.1	13	26	.6	1.1
03/15E-21P01	60-06-28	--	70	0	15	8.0	12	27	.6	1.1
03/21E-17L01	66-05-19	--	17	0	4.8	1.1	92	87	10	11
03/21E-17L02	66-04-12	--	7	0	2.4	.2	91	91	16	9.4
03/21E-17M01	66-05-19	--	61	0	14	6.4	69	68	3.9	8.5
04/15E-15G01	82-07-14	<1	450	0	50	79	48	18	1.0	8.1
04/16E-03L01	71-02-15	--	125	0	27	14	13	18	.5	1.6
04/16E-20A01	60-05-19	--	110	0	21	14	13	20	.6	2.0
04/16E-32A01	82-07-13	<1	62	1	16	5.4	9.8	25	.6	1.9
05/20E-28B01	82-04-01	<1	82	0	19	8.4	15	27	.7	3.3
05/23E-03A01	61-05-05	--	164	30	46	12	29	27	1.0	4.3
05/23E-13R02	82-03-31	<1	7	0	2.3	.3	74	87	13	13
05/23E-30D01	82-03-29	<1	68	0	15	7.5	45	53	2.4	14
05/24E-28G01	82-03-29	<1	185	35	38	22	50	36	1.6	5.0
05/24E-35R01	82-03-29	<1	219	19	63	15	48	31	1.5	7.6
05/26E-05N02	82-03-30	<1	11	0	3.6	.5	100	91	14	8.7
05/27E-04C01	82-03-30	<1	197	27	41	23	45	32	1.4	6.8
05/28E-05D01	71-10-18	--	52	0	14	4.1	80	67	5.0	26
05/28E-06R01	71-09-24	--	25	0	7.0	1.9	98	82	8.8	18
05/28E-06R02	82-03-30	<1	14	0	4.2	.9	97	89	12	10
06/20E-30P01	82-04-01	<1	70	0	16	7.2	7.6	19	.4	2.2
06/23E-11N01	70-10-21	--	25	0	6.2	2.4	44	76	5.7	15
06/23E-11P01	70-12-11	--	27	0	6.3	2.7	64	75	5.5	15
	70-10-21	--	25	0	6.2	2.4	64	76	5.7	15
06/23E-11D01	70-12-11	--	27	0	6.3	2.7	64	75	5.5	15
06/23E-15H01	62-04-30	--	47	0	12	4.1	55	66	3.6	11
	70-10-22	--	28	0	6.8	2.7	64	76	5.4	13
06/23E-15J01	70-10-22	--	28	0	6.8	2.7	64	76	5.4	13
06/23E-24R01	82-03-29	<1	25	0	6.2	2.2	64	76	5.8	15
06/24E-19K01	82-03-31	<1	345	205	74	39	76	32	1.8	7.4
06/29E-08M01	71-10-19	--	420	97	69	60	95	32	2.1	13
07/22E-09E01	82-03-29	<1	166	0	40	16	20	21	.7	1.9
07/22E-36H01	82-03-29	<1	67	0	14	7.8	27	42	1.5	12
07/23E-36R01	82-03-31	<1	33	0	9.0	2.5	58	71	4.6	15
07/24E-26R01	82-03-31	<1	104	0	25	10	20	28	.9	6.5
07/25E-12R01	82-03-30	<1	107	0	27	9.5	49	45	2.1	17
07/25E-36N04	72-08-03	--	26	0	8.0	1.4	88	81	7.9	14

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
02/13E-21E01S	30-07-29	116	--	0	--	95	--	8.6	5.0	--
02/13E-33P01	30-07-28	137	--	0	--	112	--	18	4.0	--
02/15E-17M03	71-10-13	174	--	0	--	143	--	16	12	1.0
03/15E-11N01	82-07-14	--	97	--	.0	--	81	<5.0	6.9	.4
03/15E-21R01	60-06-28	111	--	0	--	91	--	.0	2.5	.4
03/21E-17L01	66-05-19	197	--	0	--	162	--	13	34	2.2
03/21E-17L02	66-04-12	176	--	18	--	174	--	.0	25	2.4
03/21E-17M01	66-05-19	207	--	0	--	170	--	9.8	28	1.9
04/15E-15G01	82-07-14	--	646	--	.0	--	578	<5.0	3.8	.4
04/16E-03L01	71-02-15	186	--	0	--	153	--	.0	2.4	.1
04/16E-20A01	60-05-19	145	--	0	--	119	--	3.8	6.2	.3
04/16E-32A01	82-07-13	--	72	--	.0	--	61	<5.0	3.7	.4
05/20E-28B01	82-04-01	--	132	--	.0	--	110	5.0	3.3	<.1
05/23E-03A01	61-05-05	163	--	0	--	134	--	46	27	.5
05/23E-13P02	82-03-31	--	195	--	10	--	180	<5.0	8.4	1.1
05/23E-30N01	82-03-29	--	206	--	.0	--	170	9.0	6.5	.5
05/24E-28G01	82-03-29	--	183	--	.0	--	150	78	41	.3
05/24E-35P01	82-03-29	--	245	--	.0	--	200	75	34	.3
05/26E-05N02	82-03-30	--	226	--	14	--	200	5.0	25	1.9
05/27E-04C01	82-03-30	--	214	--	.0	--	170	69	22	.6
05/28E-05N01	71-10-18	192	--	0	--	157	--	45	27	1.1
05/28E-06P01	71-09-24	206	--	0	--	169	--	35	32	1.7
05/28E-06P02	82-03-30	--	195	--	10	--	170	28	30	2.0
06/20E-30P01	82-04-01	--	97	--	.0	--	79	5.0	1.2	.2
06/23E-11N01	70-10-21	206	--	0	--	169	--	.2	9.1	1.0
	70-12-11	207	--	0	--	170	--	.0	9.2	1.0
06/23E-11P01	70-10-21	206	--	0	--	169	--	.2	9.1	1.0
	70-12-11	207	--	0	--	170	--	.0	9.2	1.0
06/23E-11Q01	62-04-30	195	--	0	--	160	--	2.2	9.8	1.0
06/23E-15H01	70-10-22	205	--	0	--	168	--	.2	8.6	1.0
06/23E-15J01	70-10-22	205	--	0	--	168	--	.2	8.6	1.0
06/23E-24R01	82-03-29	--	210	--	.0	--	170	<5.0	8.7	.8
06/24E-19K01	82-03-31	--	171	--	.0	--	140	170	81	.3
06/29E-08M01	71-10-19	394	--	0	--	323	--	170	43	.6
07/22E-09E01	82-03-29	--	202	--	.0	--	170	20	13	.3
07/22E-36H01	82-03-29	--	140	--	.0	--	110	21	7.0	.3
07/23E-36R01	82-03-31	--	210	--	.0	--	170	6.0	8.4	.3
07/24E-26R01	82-03-31	--	142	--	.0	--	120	27	7.6	.1
07/25E-12R01	82-03-30	--	208	--	.0	--	160	45	20	.5
07/25E-36N04	72-08-03	221	--	0	--	181	--	18	17	1.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
02/13E-21E01S	80-07-29	48	171	162	7.0	--	--
02/13E-33P01	80-07-28	51	197	195	.00	--	--
02/15E-17M03	71-10-13	61	270	246	--	.04	--
03/15E-11N01	82-07-14	60	--	183	--	--	4.7
03/15E-21B01	80-06-28	61	155	155	.80	--	--
03/21E-17L01	65-05-19	58	311	313	.20	--	--
03/21E-17L02	65-04-12	56	292	310	.80	--	--
03/21E-17M01	65-05-19	56	295	295	1.2	--	--
04/15E-15G01	82-07-14	70	--	620	--	--	<.10
04/16E-03L01	71-02-15	55	202	205	.20	--	--
04/16E-20A01	60-05-19	47	181	179	8.0	--	--
04/16F-32A01	82-07-13	56	--	148	--	--	3.0
05/20E-28R01	82-04-01	48	--	167	--	--	<.10
05/23E-03A01	61-05-05	55	333	300	10	--	--
05/23E-13R02	82-03-31	62	--	274	--	--	<.10
05/23E-30D01	82-03-29	60	--	259	--	--	<.10
05/24E-2RG01	82-03-29	50	--	374	--	--	4.5
05/24E-35P01	82-03-29	40	--	403	--	--	5.5
05/26E-05N02	82-03-30	60	--	337	--	--	<.10
05/27E-04C01	82-03-30	50	--	363	--	--	10
05/28E-05D01	71-10-18	68	360	380	--	.06	--
05/28F-06P01	71-09-24	60	358	355	--	1.2	--
05/29E-04P02	82-03-30	61	--	345	--	--	.29
06/20E-30P01	82-04-01	61	--	148	--	--	2.9
06/23E-11N01	70-10-21	56	237	255	.00	--	--
06/23E-11P01	70-12-11	52	252	252	.10	--	--
	70-10-21	56	--	255	.00	--	--
06/23E-11Q01	70-12-11	52	252	252	.10	--	--
06/23E-15H01	82-04-30	57	--	248	.60	--	--
	70-10-22	57	240	254	.20	--	--
06/23E-15J01	70-10-22	57	--	254	.20	--	--
06/23E-24Q01	82-03-29	57	--	204	--	--	<.10
06/26E-19K01	82-03-31	57	--	589	--	--	33
06/29E-08M01	71-10-19	47	718	692	--	14	--
07/22E-09E01	82-03-29	56	--	267	--	--	1.0
07/22E-36H01	82-03-29	53	--	211	--	--	<.10
07/23E-36R01	82-03-31	57	--	260	--	--	<.10
07/24E-24R01	82-03-31	52	--	218	--	--	.89
07/25E-12P01	82-03-30	62	--	332	--	--	<.10
07/25E-36N04	72-08-03	61	336	317	--	.06	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
02/13E-21F01S	80-07-29	30	--	--	--
02/13E-33R01	80-07-28	40	--	--	--
02/15E-17M03	71-10-13	40	--	40	--
03/15E-11N01	82-07-14	--	5	--	<1
03/15E-21B01	60-06-28	730	--	--	--
03/21E-17L01	66-05-19	10	--	--	--
03/21E-17L02	66-04-12	170	--	--	--
03/21E-17M01	66-05-19	10	--	--	--
04/15E-15G01	82-07-14	--	240	--	55
04/16E-03L01	71-02-15	30	--	40	--
04/16E-20A01	60-05-19	160	--	--	--
04/16E-32A01	82-07-13	--	28	--	10
05/20E-28R01	82-04-01	--	110	--	85
05/23E-03A01	61-05-05	<10	--	--	--
05/23E-13R02	82-03-31	--	9	--	5
05/23E-30D01	82-03-29	--	41	--	60
05/24E-28G01	82-03-29	--	9	--	<3
05/24E-35R01	82-03-29	--	9	--	4
05/26E-05N02	82-03-30	--	9	--	5
05/27E-04C01	82-03-30	--	11	--	3
05/28E-05D01	71-10-18	--	20	--	20
05/28E-06P01	71-09-24	--	10	--	0
05/28E-06P02	82-03-30	--	11	--	3
06/20E-30P01	82-04-01	--	9	--	<3
06/23E-11N01	70-10-21	30	--	<20	--
06/23E-11P01	70-12-11	40	--	<20	--
	70-10-21	30	--	<20	--
	70-12-11	40	--	<20	--
06/23E-11Q01	82-04-30	20	--	--	--
06/23E-15H01	70-10-22	30	--	<20	--
06/23E-15J01	70-10-22	30	--	<20	--
06/23E-24R01	82-03-29	--	72	--	12
06/26E-19K01	82-03-31	--	9	--	5
06/29E-08M01	71-10-19	--	10	--	0
07/22E-09E01	82-03-29	--	9	--	3
07/22E-36H01	82-03-29	--	84	--	100
07/23E-36R01	82-03-31	--	130	--	19
07/24E-26R01	82-03-31	--	16	--	3
07/25E-12R01	82-03-30	--	96	--	120
07/25E-36N04	72-08-03	20	--	--	0

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
07/25E-36N04	46 02 37	119 38 30	04	121YKIM	72-08-04	860	730.00	454	8.2	21.0
				121YKIM	72-10-05	860	--	430	8.2	21.6
07/25E-36P01	46 02 38	119 38 29	01	122WNPM	82-03-31	840	730.00	410	8.3	21.5
07/24E-05R03	46 07 51	119 35 16	01	122WNPM	82-03-31	1070	1135.00	490	7.6	20.4
07/27E-29Q01	46 03 26	119 27 46	01	122SDLM	82-03-30	325	1150.00	1140	7.4	14.9
09/24E-27K01	46 13 50	119 32 27	01	--	70-10-12	670	--	405	7.8	21.5

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
07/25E-36N04	72-08-04	--	17	0	4.5	1.4	92	85	10	14
	72-10-05	--	21	0	5.6	1.7	81	82	8.0	14
07/25E-36P01	82-03-31	<1	25	0	6.8	1.9	80	79	7.2	17
07/24E-05R03	82-03-31	<1	123	0	31	11	49	42	2.0	18
07/27E-29Q01	82-03-30	<1	518	358	120	53	42	15	.8	7.5
09/24E-27K01	70-10-12	--	124	0	30	12	92	34	1.3	9.0

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
07/25E-36N04	72-08-04	225	--	0	--	185	--	18	18	1.2
	72-10-05	209	--	0	--	171	--	24	16	1.1
07/25E-36P01	82-03-31	--	210	--	.0	--	170	27	26	.6
07/24E-05R03	82-03-31	--	214	--	.0	--	170	54	20	.2
07/27E-29Q01	82-03-30	--	191	--	.0	--	150	250	120	.2
09/24E-27K01	70-10-12	158	--	0	--	130	--	54	12	.4

TABLE 2.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS NO3)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
07/25E-36N04	72-08-04	61	340	321	--	.02	--
	72-10-05	52	318	298	--	.08	--
07/25E-36P01	82-03-31	55	--	318	--	--	<.10
07/26E-05R03	82-03-31	69	--	360	--	--	<.10
07/27E-29Q01	82-03-30	54	--	741	--	--	22
09/26E-27K01	70-10-12	59	258	286	.50	--	--

LOCAL IDENT-I-FIER	DATE OF SAMPLE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
07/25E-36N04	72-08-04	20	--	--	0
	72-10-05	30	--	--	8
07/25E-36P01	82-03-31	--	25	--	14
07/26E-05R03	82-03-31	--	290	--	160
07/27E-29Q01	82-03-30	--	<9	--	<3
09/26E-27K01	70-10-12	30	--	<20	--

TABLE 2.--Continued

WALLA WALLA - TUCANNON

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
04/33E-03P01	46 01 19	118 39 32	01	112GLCV	82-06-23	170	470.00	538	7.4	16.2
04/33E-08P01	46 00 29	118 42 49	01	122WNPM	82-07-13	325	563.00	422	7.9	19.4
04/34E-07J01	46 00 29	118 35 45	01	122WNPM	82-06-23	1460	520.00	525	8.8	37.3
04/34E-11P01	46 01 08	118 31 15	01	--	62-10-30	62	--	552	7.2	12.2
06/35E-01C01	46 02 03	118 22 39	01	--	71-09-22	535	800.00	237	7.1	--
06/35E-10P01	46 00 24	118 25 18	01	--	58-08-01	1135	735.00	226	8.2	24.0
06/35E-12N01	46 00 20	118 22 57	01	--	46-11-19	590	775.00	239	--	--
06/35E-18A01	46 00 14	118 28 18	01	121CRRV	73-03-07	720	669.00	238	8.3	26.1
				121CRRV	73-07-12	1308	669.00	233	8.7	25.5
06/36E-04A03	46 02 03	118 18 22	01	112GLCV	82-06-22	190	980.00	375	7.6	13.9
06/36E-07D02	46 01 13	118 21 42	01	--	70-10-23	556	833.00	236	8.2	17.8
06/36E-07D03	46 01 12	118 21 40	01	--	70-12-02	115	835.00	175	7.7	14.0
06/36E-07E02	46 00 54	118 21 49	01	122WNPM	82-06-23	605	820.00	236	8.0	20.2
06/36E-09P01	46 00 25	118 18 51	01	--	46-11-29	2061	1000.00	186	--	18.0
06/37E-05F01	46 01 40	118 12 34	01	--	70-10-23	612	1555.00	127	8.0	13.0
07/31E-10P01	46 05 46	118 54 35	01	112GLCV	82-06-24	84	380.00	349	7.6	19.1
07/32E-07W01	46 06 08	118 51 47	01	122SDLH	82-06-24	400	585.00	308	7.7	--
07/32E-36P01	46 02 13	118 44 47	01	--	71-09-20	1016	--	313	7.9	24.0
07/33E-34P02	46 02 15	118 40 13	01	--	59-10-27	30	440.00	848	7.7	14.5
				--	60-05-24	30	--	959	7.7	--
				--	60-11-30	30	--	753	7.8	13.5
07/33E-34P03	46 04 16	118 40 12	01	--	61-05-01	26	--	847	8.0	14.0
07/33E-35G01	46 02 34	118 39 35	01	112GLCV	82-06-23	100	445.00	2200	7.4	13.0
07/34E-21W03	46 04 05	118 34 11	01	122WNPM	82-06-23	675	530.00	330	7.8	18.6
07/34E-36R02	46 02 56	118 29 54	01	112GLCV	82-06-23	145	590.00	508	7.0	14.7
07/35E-23W01	46 04 07	118 24 20	01	--	46-11-21	515	772.00	214	--	20.0
07/35E-31P01	46 02 54	118 28 47	01	122WNPM	82-06-24	1104	645.00	505	7.4	14.3
07/35E-32F02	46 02 38	118 27 46	01	121CRRV	64-11-16	755	--	241	8.2	14.4
07/35E-32H02	46 02 35	118 27 11	01	112GLCV	82-06-24	170	650.00	500	7.5	13.7
07/35E-33H03	46 02 39	118 25 46	01	122WNPM	82-06-23	802	690.00	245	7.9	19.3
07/35E-33J01	46 02 27	118 25 46	01	--	59-10-29	89	--	501	7.3	13.5
				--	60-05-29	88	--	586	7.0	13.5
				--	60-11-30	89	--	463	7.4	12.0
07/35E-35C01	46 02 49	118 24 00	01	112GLCV	82-06-23	210	765.00	462	6.8	14.9
07/35E-36F01	46 02 37	118 22 54	01	--	70-10-23	700	--	237	8.2	20.0
07/35E-36F03	46 02 43	118 22 54	01	--	59-10-22	708	800.00	229	8.2	20.0
07/36E-10B01	46 04 26	118 17 26	01	122WNPM	82-06-22	930	1140.00	227	8.0	20.7
07/36E-10D01	46 04 22	118 17 59	01	--	70-12-02	240	1116.00	217	7.9	14.8
07/36E-13D01	46 03 32	118 15 31	01	--	66-02-01	923	--	205	7.7	--
				--	67-04-11	923	--	201	7.8	10.0

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
06/33E-03P01	82-06-23	<1	221	25	62	16	32	23	1.0	5.2
06/33E-08P01	82-07-13	<1	145	14	35	14	30	30	1.1	7.4
06/34E-07P01	82-06-23	<1	85	0	24	6.1	81	64	4.0	9.8
06/34E-11P01	62-10-30	--	173	0	46	14	55	40	1.9	7.6
06/35E-01C01	71-09-22	--	92	0	23	8.4	10	18	.5	3.7
06/35E-10P01	58-08-01	--	37	0	12	1.7	32	59	2.4	8.6
06/35E-12N01	46-11-19	--	88	0	24	6.8	--	--	--	--
06/35E-18A01	73-03-07	--	18	0	6.2	.6	43	76	4.6	9.5
	73-07-12	--	21	0	6.7	1.1	40	73	3.9	8.4
06/36E-04A03	82-06-22	<1	150	0	37	14	25	26	.9	3.5
06/36E-07D02	70-10-23	--	76	0	20	6.4	20	35	1.0	4.7
06/36E-07D03	70-12-02	--	64	0	15	6.4	9.6	24	.5	2.9
06/36E-07E02	82-06-23	<1	75	0	20	6.2	19	34	1.0	5.0
06/36E-09P01	46-11-29	--	80	0	16	9.8	--	--	--	3.4
06/37E-05E01	70-10-23	--	46	0	10	5.2	6.6	22	.4	2.9
07/31E-10P01	82-06-24	<1	119	0	32	9.5	31	35	1.3	4.6
07/32E-07M01	82-06-24	<1	36	0	11	2.1	50	68	3.8	12
07/32E-36D01	71-09-20	--	36	0	9.7	2.9	48	65	3.6	16
07/33E-34P02	59-10-27	--	177	0	43	17	170	60	4.4	8.1
	60-05-24	--	208	0	52	19	153	60	4.8	8.4
	60-11-30	--	148	0	38	13	123	63	4.5	8.2
07/33E-34P03	61-05-01	--	182	0	48	15	130	59	4.3	9.4
07/33E-35G01	82-06-23	<1	459	0	160	63	310	50	5.4	14
07/34E-21M03	82-06-23	<1	89	0	26	5.8	41	47	2.0	8.5
07/34E-36R02	82-06-23	<1	204	29	52	18	24	20	.8	8.2
07/35E-23M01	46-11-21	--	36	0	11	2.1	--	--	--	7.8
07/35E-31P01	82-06-24	<1	183	12	50	14	29	25	1.0	8.0
07/35E-32F02	64-11-16	--	35	0	9.0	3.0	39	67	3.0	5.7
07/35E-32H02	82-06-24	<1	184	20	44	18	29	25	1.0	7.0
07/35E-33H03	82-06-23	<1	76	0	21	5.7	21	35	1.1	5.7
07/35E-33J01	59-10-29	--	220	25	50	23	13	11	.4	6.0
	60-05-29	--	273	34	65	27	17	12	.5	6.8
	60-11-30	--	210	20	51	20	12	11	.4	6.2
07/35E-35C01	82-06-23	<1	177	18	43	17	27	24	.9	7.1
07/35E-36F01	70-10-23	--	68	0	19	5.1	22	39	1.2	5.4
07/35E-36F03	59-10-22	--	73	0	20	5.5	21	37	1.1	5.2
07/36E-10P01	82-06-22	<1	81	0	20	7.6	16	29	.8	4.0
07/36E-10Q01	70-12-02	--	79	0	18	8.2	12	24	.6	3.5
07/36E-13Q01	66-02-01	--	79	0	18	8.3	12	24	.6	3.6
	67-04-11	--	91	0	19	8.2	11	22	.5	3.9

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
06/33E-03P01	82-06-23	--	256	--	.0	--	196	67	16	.3
06/33E-08P01	82-07-13	--	152	--	.0	--	129	38	29	.5
06/34E-07P01	82-06-23	--	133	--	25	--	124	28	72	2.4
06/34E-11R01	62-10-30	307	--	0	--	252	--	28	9.8	.2
06/35E-01C01	71-09-22	130	--	0	--	107	--	8.0	3.7	.3
06/35E-10P01	59-08-01	126	--	0	--	103	--	3.2	6.5	.7
06/35E-12N01	66-11-19	142	--	0	--	116	--	31	6.5	.6
06/35F-18A01	73-03-07	142	--	0	--	116	--	4.1	5.2	1.2
	73-07-12	123	--	0	--	116	--	3.6	4.2	1.1
06/36E-04A03	82-06-22	--	213	--	.0	--	170	10	6.7	.6
06/36E-07D02	70-10-23	137	--	0	--	112	--	4.6	4.0	.5
06/36E-07D03	70-12-02	100	--	0	--	82	--	3.6	2.3	.3
06/36E-07E02	82-06-23	--	133	--	.0	--	108	11	5.4	.5
06/36E-09P01	46-11-29	108	--	0	--	89	--	5.7	3.8	.6
06/37E-05F01	70-10-23	72	--	0	--	59	--	2.6	.8	.3
07/31E-10P01	82-06-24	--	143	--	.0	--	144	23	16	.7
07/32E-07M01	82-06-24	--	152	--	.0	--	118	6.0	26	2.4
07/32E-36D01	71-09-20	156	--	0	--	128	--	3.8	20	1.3
07/33E-34P02	59-10-27	508	--	0	--	417	--	20	17	.2
	60-05-24	578	--	0	--	474	--	33	22	.3
	60-11-30	456	--	0	--	374	--	22	18	.4
07/33E-34P03	61-05-01	494	--	0	--	405	--	30	25	.4
07/33E-35S01	82-06-23	--	1270	--	.0	--	996	50	140	.2
07/34E-21M03	82-06-23	--	202	--	.0	--	155	12	9.1	.7
07/34E-36R02	82-06-23	--	227	--	.0	--	175	30	36	.3
07/35E-23M01	46-11-21	125	--	0	--	103	--	3.8	3.6	.6
07/35E-31R01	82-06-24	--	213	--	.0	--	171	30	39	.3
07/35E-32F02	66-11-16	140	--	0	--	115	--	5.4	4.0	.8
07/35E-32H02	82-06-24	--	206	--	.0	--	164	26	34	.2
07/35E-33H03	82-06-23	--	138	--	.0	--	112	6.0	6.5	.5
07/35E-33J01	59-10-29	238	--	0	--	195	--	16	23	.2
	60-05-29	292	--	0	--	239	--	19	31	.2
	60-11-30	232	--	0	--	190	--	14	22	.2
07/35E-35C01	82-06-23	--	200	--	.0	--	159	20	17	.2
07/35E-36F01	70-10-23	135	--	0	--	111	--	5.6	3.9	.5
07/35E-36F03	59-10-22	136	--	0	--	112	--	5.4	4.2	.5
07/36E-10B01	82-06-22	--	144	--	.0	--	117	6.0	1.7	.5
07/36E-10D01	70-12-02	122	--	0	--	100	--	2.4	2.2	.4
07/36E-13N01	66-02-01	126	--	0	--	103	--	3.0	1.2	.4
	67-04-11	124	--	0	--	103	--	3.4	.0	.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
06/33E-03R01	82-06-23	51	--	376	--	--	.49
06/33E-04P01	82-07-13	56		285	--	--	4.8
06/34E-07R01	82-06-23	98	--	423	--	--	.52
06/34E-11R01	82-10-30	47	--	359	2.8	--	--
06/35E-01C01	71-09-22	52	196	173	--	2.0	--
06/35E-10P01	59-08-01	72	186	199	.00	--	--
06/35E-12H01	45-11-19	66	--	--	.20	--	--
06/35E-18A01	73-03-07	89	241	229	--	--	.04
	73-07-12	93	228	237	--	--	<.10
06/36E-04A03	82-06-22	54	--	256	--	--	2.7
06/36E-07D02	70-10-23	52	177	180	.00	--	--
06/36E-07D03	70-12-02	49	148	138	.60	--	--
06/36E-07E02	82-06-23	54	--	197	--	--	<.10
06/36E-09P01	46-11-29	40	154	--	.40	--	--
06/37E-05F01	70-10-23	50	114	114	1.1	--	--
07/31E-10P01	82-06-24	43	--	250	--	--	.47
07/32E-07M01	82-06-24	97	--	281	--	--	<.10
07/32E-36D01	71-09-20	80	260	259	--	.01	--
07/33E-34P02	59-10-27	43	554	528	5.8	--	--
	60-05-24	44	621	616	6.5	--	--
	60-11-30	34	488	481	.10	--	--
07/33E-34P03	61-05-01	35	555	536	5.6	--	--
07/33E-35G01	82-06-23	46	--	1408	--	--	14
07/34E-21M03	82-06-23	65	--	267	--	--	.37
07/34E-36R02	82-06-23	60	--	330	--	--	3.1
07/35E-23M01	46-11-21	65	171	--	.10	--	--
07/35E-31R01	82-06-24	50	--	325	--	--	.93
07/35E-32E02	64-11-16	49	187	185	.00	--	--
07/35E-32M02	82-06-24	53	--	313	--	--	5.2
07/35E-33M03	82-06-23	63	--	197	--	--	.29
07/35E-33J01	59-10-29	58	312	306	7.0	--	--
	60-05-29	56	389	366	8.6	--	--
	60-11-30	53	313	292	6.6	--	--
07/35E-35C01	82-06-23	53	--	292	--	--	6.9
07/35E-36F01	70-10-23	62	194	190	.00	--	--
07/35E-36F03	59-10-22	65	200	194	.00	--	--
07/36E-10R01	82-06-22	42	--	189	--	--	<.10
07/36E-10D01	70-12-02	49	170	156	4.5	--	--
07/36E-13R01	66-07-01	58	159	158	.00	--	--
	67-04-11	58	160	158	.10	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
06/33E-03P01	82-06-23	--	110	--	83
06/33E-08P01	82-07-13	--	130	--	5
06/34E-07P01	82-06-23	--	7	--	11
06/34E-11P01	62-10-30	<10	--	--	--
06/35E-01C01	71-09-22	250	--	<20	--
06/35E-10P01	58-08-01	30	--	--	--
06/35E-12N01	66-11-19	--	--	--	--
06/35E-18A01	73-03-07	--	--	--	--
	73-07-12	--	--	--	--
06/36E-04A03	82-06-22	--	<3	--	3
06/36E-07D02	70-10-23	940	--	50	--
06/36E-07D03	70-12-02	30	--	<20	--
06/36E-07E02	82-06-23	--	46	--	31
06/36E-09P01	66-11-29	90	--	--	--
06/37E-05F01	70-10-23	20	--	<20	--
07/31E-10P01	82-06-24	--	18	--	3
07/32E-07N01	82-06-24	--	10	--	10
07/32E-36Q01	71-09-20	20	--	0	--
07/33E-34P02	59-10-27	110	--	--	--
	60-05-24	4200	--	--	--
	60-11-30	150	--	--	--
07/33E-34P03	61-05-01	50	--	--	--
07/33E-35G01	82-06-23	--	40	--	30
07/34E-21M03	82-06-23	--	11	--	7
07/34E-34P02	82-06-23	--	8	--	2
07/35E-23M01	66-11-21	30	--	--	--
07/35E-31R01	82-06-24	--	17	--	70
07/35E-32F02	64-11-16	40	--	--	--
07/35E-32M02	82-06-24	--	14	--	66
07/35E-33M03	82-06-23	--	9	--	23
07/35E-33J01	59-10-29	20	--	--	--
	60-05-29	20	--	--	--
	60-11-30	30	--	--	--
07/35E-35C01	82-06-23	--	13	--	1
07/35E-36F01	70-10-23	60	--	50	--
07/35E-36F03	59-10-22	40	--	--	--
07/36E-10H01	82-06-22	--	<3	--	2
07/36E-10D01	70-12-02	150	--	<20	--
07/36E-13D01	66-02-01	30	--	<50	--
	67-04-11	--	--	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
07/36E-13F01	46 05 15	118 15 17	01	--	46-11-26	810	1260.00	150	--	--
				--	59-10-27	810	--	163	7.7	11.0
07/36E-19R01	46 03 57	118 20 48	01	--	70-10-21	1590	925.00	201	8.1	29.0
07/36E-20H01	46 04 21	118 19 44	01	--	70-10-22	1202	990.00	232	8.0	22.0
07/36E-22N01	46 03 56	118 19 11	01	--	59-10-27	789	1045.00	257	8.1	14.5
07/36E-27N04	46 02 59	118 17 56	01	112GLCV	82-06-22	122	1040.00	262	7.3	12.9
07/36E-28R01	46 03 11	118 19 20	01	121CRRV	60-07-29	906	1020.00	245	8.2	23.5
				121CRRV	70-10-23	906	1022.00	238	8.2	15.0
07/36E-30P01	46 03 05	118 20 52	01	112GLCV	82-06-23	270	895.00	192	6.6	13.1
07/36E-33A01	46 02 49	118 18 25	01	--	60-07-29	762	1020.00	230	8.2	16.5
07/36E-35R01	46 04 17	118 16 02	01	--	46-11-21	222	--	231	--	--
07/37E-05D01	46 07 07	118 13 04	01	--	46-11-15	118	1290.00	459	--	--
07/37E-13J01	46 05 09	118 07 12	01	--	46-11-18	525	--	227	--	--
07/37E-16Q01	46 04 56	118 11 15	01	--	46-11-26	14	--	291	--	--
07/37E-18E01	46 05 17	118 14 10	01	--	57-01-28	1169	1320.00	169	8.0	13.5
07/37E-18G01	46 05 16	118 13 44	01	--	46-11-18	100	--	213	--	--
				--	57-01-28	--	--	169	8.0	13.3
08/30E-01N01	46 11 51	119 00 32	01	112GLCV	82-06-24	58	385.00	885	7.7	17.5
08/31E-34H01	46 07 54	118 54 05	01	--	70-09-09	480	--	327	9.0	25.4
08/37E-33M01	46 07 35	118 11 37	01	--	70-10-23	490	--	248	8.1	10.8
09/30E-35R01	46 12 52	119 00 43	01	112GLCV	82-06-24	56	350.00	565	7.3	16.0
09/31E-24M02	46 14 50	118 53 00	01	--	61-04-28	155	--	364	7.9	11.5
09/37E-12H01	46 16 31	118 07 05	01	--	62-10-30	21	--	530	7.1	13.9
10/37E-24G01	46 20 07	118 07 30	01	--	72-05-24	482	--	356	7.8	14.2
10/38E-36C01	46 18 27	118 00 07	01	--	59-10-28	80	--	182	7.3	11.0
10/39E-20G01	46 20 05	117 57 25	01	122GRRD	82-06-22	50	1680.00	350	7.0	12.7
10/39E-30H01	46 19 09	117 58 17	01	--	60-06-02	1250	--	247	7.6	15.5
10/39E-32C01	46 18 29	117 57 47	01	122GRRD	82-06-22	484	1650.00	192	7.0	16.4
12/42E-31L01	46 28 33	117 35 07	01	--	59-10-28	997	--	162	8.0	21.5
12/42E-33Q01	46 28 21	117 33 25	01	122CRRV	82-06-22	130	1985.00	300	7.2	15.7
12/42E-34R01	46 28 19	117 31 50	01	122GRRD	82-06-22	57	2060.00	202	7.3	17.3
13/39E-26E01	46 35 02	118 01 00	01	--	61-01-27	243	--	227	7.6	20.0
13/39E-27R01	46 35 08	118 19 41	01	--	61-05-01	100	--	350	7.7	19.0
13/42E-13D01	46 36 58	117 29 24	01	--	72-05-24	118	--	342	7.8	11.4
14/43E-30J01	46 40 04	117 26 37	01	--	67-02-02	65	--	232	7.0	--
14/43E-32C01	46 39 31	117 25 58	01	122GRRD	70-08-12	220	656.00	190	8.3	15.0

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
07/36E-13F01	66-11-26	--	76	0	17	8.2	--	--	--	--
	69-10-27	--	67	0	16	6.5	6.2	16	.3	2.6
07/36E-19R01	70-10-21	--	47	0	13	3.6	23	48	1.5	5.6
07/36E-20H01	70-10-22	--	65	0	17	5.5	25	43	1.4	6.1
07/36E-22N01	59-10-27	--	69	0	19	5.2	25	42	1.4	5.2
07/36E-27N04	82-06-22	<1	119	0	28	12	9.6	15	.4	2.7
07/36E-28R01	60-07-29	--	62	0	16	5.3	29	48	1.7	5.5
	70-10-23	--	55	0	16	3.6	29	51	1.8	4.6
07/36E-30R01	82-06-23	<1	80	0	19	7.8	6.4	14	.3	4.0
07/36E-33A01	60-07-29	--	71	0	19	5.8	23	40	1.2	3.2
07/36E-35R01	66-11-21	--	109	0	28	9.4	--	--	--	--
07/37E-05D01	66-11-15	--	217	0	54	20	--	--	--	--
07/37E-13J01	66-11-18	--	100	13	22	11	--	--	--	--
07/37E-16D01	66-11-26	--	141	3	35	13	--	--	--	--
07/37E-18E01	57-01-28	--	69	0	17	6.5	9.3	22	.5	2.6
07/37E-18S01	66-11-18	--	86	0	20	8.7	--	--	--	--
	57-01-28	--	69	0	17	6.5	9.3	22	.5	2.6
08/30E-01N01	82-06-24	<1	341	44	97	24	57	26	1.4	9.9
08/31E-34H01	70-09-09	--	4	0	2.1	.2	68	90	13	8.2
08/37E-33M01	70-10-23	--	94	0	23	9.3	15	24	.7	4.0
09/30E-35R01	82-06-24	<1	237	0	67	17	31	22	.9	6.2
09/31E-24M02	61-04-28	--	143	15	34	14	19	22	.7	4.6
09/37E-12H01	62-10-30	--	219	29	48	24	23	18	.7	5.4
10/37E-24S01	72-05-24	--	163	0	42	14	17	18	.6	2.5
10/38E-36C01	59-10-28	--	78	0	16	7.3	5.4	14	.3	3.5
10/39E-20S01	82-06-22	<1	163	4	42	14	13	15	.5	2.4
10/39E-30H01	60-04-02	--	109	0	27	10	8.8	15	.4	2.2
10/39E-32C01	82-06-22	<1	89	0	23	7.6	6.2	13	.3	2.7
12/42E-31L01	59-10-28	--	49	0	16	2.3	10	28	.6	5.5
12/42E-33D01	82-06-22	<1	139	7	36	12	10	13	.4	4.0
12/42E-34R01	82-06-22	<1	99	0	26	8.3	7.1	13	.3	3.5
13/38E-26E01	61-01-27	--	96	0	24	8.8	9.4	16	.4	5.8
13/38E-27R01	61-05-01	--	135	32	38	9.7	17	21	.7	3.5
13/42E-13D01	72-05-24	--	149	8	40	12	16	19	.6	.7
14/43E-30J01	67-07-02	--	99	0	25	9.0	8.5	15	.4	2.3
14/43E-32C01	70-08-12	--	34	0	10	2.1	25	57	2.0	5.2

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
07/36E-13F01	46-11-26	96	--	0	--	79	--	9.7	1.8	.2
	59-10-27	97	--	0	--	80	--	1.7	1.0	.2
07/36E-19P01	70-10-21	116	--	0	--	95	--	3.6	2.8	.8
07/36E-20H01	70-10-22	138	--	0	--	113	--	6.6	1.9	.9
07/36E-22N01	59-10-27	149	--	0	--	122	--	5.3	2.5	.9
07/36E-27N04	82-06-22	--	158	--	.0	--	128	7.0	2.2	.2
07/36E-28P01	60-07-29	148	--	0	--	121	--	5.0	3.0	1.0
	70-10-23	140	--	0	--	115	--	4.6	2.7	.8
07/36E-30P01	82-06-23	--	106	--	.0	--	70	10	4.8	.1
07/36E-33A01	60-07-29	142	--	0	--	116	--	2.8	2.5	.7
07/36E-35P01	46-11-21	142	--	0	--	116	--	30	3.2	.6
07/37E-05D01	46-11-15	291	--	0	--	239	--	10	3.8	.6
07/37E-13J01	46-11-18	106	--	0	--	97	--	19	3.2	.6
07/37E-16D01	46-11-26	168	--	0	--	138	--	28	3.5	.4
07/37E-18E01	57-01-28	106	--	0	--	87	--	2.5	1.0	.2
07/37E-18G01	46-11-18	132	--	0	--	108	--	16	4.5	.2
	57-01-28	106	--	--	--	87	--	2.5	1.0	.2
09/30E-01N01	82-06-24	--	385	--	.0	--	297	69	51	.4
09/31E-34H01	70-09-09	113	--	18	--	123	--	2.8	22	3.9
09/37E-33M01	70-10-23	154	--	0	--	126	--	4.0	1.3	.5
09/30E-35R01	82-06-24	--	312	--	.0	--	239	30	18	.4
09/31E-24M02	61-04-28	156	--	0	--	128	--	38	12	.5
09/37E-12H01	62-10-30	232	--	0	--	190	--	13	46	.2
10/37E-24S01	72-05-24	212	--	0	--	174	--	4.4	2.7	.3
10/38E-36C01	59-10-28	86	--	0	--	71	--	3.5	3.5	.2
10/39E-20S01	82-06-22	--	210	--	.0	--	159	9.0	4.0	.4
10/39E-30H01	60-06-02	148	--	0	--	121	--	2.2	2.5	.3
10/39E-32C01	82-06-22	--	131	--	.0	--	98	6.0	2.2	.2
12/42E-31L01	59-10-28	90	--	0	--	74	--	3.1	1.8	.4
12/42E-33D01	82-06-22	--	173	--	.0	--	132	13	7.7	.2
12/42E-34R01	82-06-22	--	131	--	.0	--	100	6.0	3.3	.3
13/38E-26E01	61-01-27	140	--	0	--	115	--	2.8	2.0	.5
13/38E-27R01	61-05-01	125	--	0	--	103	--	42	17	.3
13/42E-13D01	72-05-24	202	--	0	--	166	--	2.4	1.7	.4
14/43E-30J01	67-02-02	122	--	0	--	100	--	8.0	3.0	.2
14/43E-32C01	70-08-12	106	--	1	--	89	--	2.4	1.0	.8

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
07/36E-13F01	45-11-26	54	--	--	.20	--	--
	59-10-27	50	140	132	.50	--	--
07/36E-19R01	70-10-21	68	184	177	.30	--	--
07/36E-20H01	70-10-22	61	190	192	.00	--	--
07/36E-22N01	59-10-27	61	196	197	.20	--	--
07/36E-27N04	82-06-22	47	--	186	--	--	1.8
07/36E-28P01	60-07-29	62	193	200	.10	--	--
	70-10-23	36	169	166	.00	--	--
07/36E-30R01	82-06-23	44	--	148	--	--	3.3
07/36E-33A01	60-07-29	46	168	173	.10	--	--
07/36E-35R01	45-11-21	54	--	--	3.4	--	--
07/37E-05D01	45-11-15	34	--	--	7.0	--	--
07/37E-13J01	46-11-18	56	--	--	3.9	--	--
07/37E-16Q01	45-11-26	52	--	--	3.8	--	--
07/37E-18E01	57-01-28	56	132	147	.20	--	--
07/37E-18G01	46-11-18	39	--	--	.20	--	--
	57-01-28	56	132	147	.20	--	--
08/30E-01N01	82-06-24	42	--	540	--	--	9.1
08/31E-34H01	70-09-09	83	275	283	.00	--	--
08/37E-33M01	70-10-23	59	193	192	.00	--	--
09/30E-35R01	82-06-24	38	--	361	--	--	4.6
09/31E-24H02	61-04-28	44	246	243	2.3	--	--
09/37E-12H01	62-10-30	49	--	323	.60	--	--
10/37E-24G01	72-05-24	50	290	237	--	2.5	--
10/38E-36C01	59-10-28	48	139	130	8.6	--	--
10/39E-20G01	82-06-22	49	--	237	--	--	4.3
10/39E-30H01	60-06-02	52	180	178	2.1	--	--
10/39E-32C01	82-06-22	51	--	163	--	--	1.0
12/42E-31L01	59-10-28	74	156	157	.30	--	--
12/42E-33Q01	82-06-22	56	--	223	--	--	2.8
12/42E-34R01	82-06-22	54	--	173	--	--	1.2
13/38E-26E01	61-01-27	47	194	189	1.0	--	--
13/38E-27A01	61-05-01	34	227	223	2.0	--	--
13/42E-13D01	72-05-24	47	294	220	--	3.5	--
14/43E-30J01	67-02-02	43	170	159	7.8	--	--
14/43E-32C01	70-09-12	40	150	141	.00	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
07/36E-19F01	46-11-26	--	--	--	--
	59-10-27	10	--	--	--
07/36E-19R01	70-10-21	40	--	<20	--
07/36E-20H01	70-10-22	50	--	<20	--
07/36E-22N01	59-10-27	770	--	--	--
07/36E-27N04	82-06-22	--	<3	--	2
07/36E-28R01	60-07-29	60	--	--	--
	70-10-23	1620	--	150	--
07/36E-30R01	82-06-23	--	7	--	<1
07/36E-33A01	60-07-29	170	--	--	--
07/36E-35R01	46-11-21	--	--	--	--
07/37E-05D01	46-11-15	--	--	--	--
07/37E-13J01	46-11-18	--	--	--	--
07/37E-16Q01	46-11-26	--	--	--	--
07/37E-18E01	57-01-28	30	--	--	--
07/37E-18G01	46-11-18	--	--	--	--
	57-01-28	30	10	--	--
08/30E-01N01	82-06-24	--	5	--	2
08/31E-34H01	70-09-09	20	--	50	--
08/37E-33M01	70-10-23	430	--	50	--
09/30E-35R01	82-06-24	--	19	--	9
09/31E-24M02	61-04-28	20	--	--	--
09/37E-12H01	62-10-30	420	--	--	--
10/37E-24G01	72-05-24	430	--	<20	--
10/39E-36C01	59-10-28	50	--	--	--
10/39E-20G01	82-06-22	--	<3	--	6
10/39E-30H01	60-06-02	20	--	--	--
10/39E-32C01	82-06-22	--	<3	--	1
12/42E-31L01	59-10-28	40	--	--	--
12/42E-33D01	82-06-22	--	<3	--	<1
12/42E-34P01	82-06-22	--	<3	--	3
13/39E-26E01	61-01-27	10	--	--	--
13/38E-27R01	61-05-01	<10	--	--	--
13/42E-13D01	72-05-24	10	--	<20	--
14/43E-30J01	67-02-02	--	--	--	--
14/43E-32C01	70-08-12	30	--	--	--

TABLE 2.--Continued

PALOUSE

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
13/40E-09F02	46 37 40	117 49 02	01	--	69-08-08	--	--	348	7.8	18.0
14/42E-13R01	46 42 11	117 29 07	01	--	69-08-21	209	--	423	7.2	15.0
14/43E-19J01	46 40 51	117 26 44	01	--	72-03-03	176	--	269	7.8	--
14/44E-14P01	46 41 33	117 14 27	01	122CRRV	71-09-29	600	--	307	8.4	16.2
14/44E-14P02	46 41 32	117 14 25	02	122CRRV	82-06-21	432	2580.00	273	7.2	14.4
14/45E-05D01	46 43 55	117 10 47	01	121CRRV	46-08-16	164	--	--	--	--
14/45E-05D03	46 43 55	117 10 49	03	122CRRV	55-03-30	167	2341.00	304	8.4	--
				122CRRV	59-11-17	167	2342.00	346	7.7	--
				122CRRV	82-06-22	167	2342.00	331	7.7	13.9
14/45E-05D04	46 43 56	117 10 41	01	121CRRV	55-03-30	166	2342.00	305	8.2	--
14/45E-05E01	46 43 46	117 10 37	01	121CRRV	55-03-30	91	2340.00	299	8.2	--
14/45E-05F02	46 43 48	117 10 11	02	121CRRV	38-12-02	237	--	--	--	13.5
14/45E-05F03	46 43 48	117 10 12	03	121CRRV	55-03-28	223	2365.00	323	7.8	--
14/45E-05G01	46 43 46	117 10 08	01	121CRRV	55-03-28	213	2364.00	305	8.3	--
14/45E-08E01	46 42 47	117 10 52	01	122GRRD	82-06-22	712	2442.00	307	7.6	12.8
14/46E-19M01	46 40 55	117 04 18	01	122WNPM	82-06-21	80	2481.00	345	7.3	10.7
15/44E-15A02	46 47 06	117 14 52	01	--	58-03-28	78	2244.00	404	6.8	10.0
				--	59-11-17	78	--	406	7.0	--
15/45E-07R03	46 47 43	117 10 49	02	122ELRR	82-06-21	242	2560.00	233	7.3	10.9
15/45E-26K01	46 45 22	117 05 15	01	121CRRV	55-03-30	302	2608.00	287	8.3	--
				121CRRV	61-05-01	302	--	421	8.4	10.0
15/45E-29B02	46 45 32	117 10 03	01	121CRRV	70-12-02	247	--	325	7.9	13.6
15/45E-29B03	46 45 33	117 10 03	01	122CRRV	82-06-21	400	2470.00	392	7.6	14.6
15/45E-32N01	46 44 09	117 10 32	01	121CRRV	55-03-30	231	2340.00	291	8.5	--
15/45E-32N02	46 44 09	117 10 32	02	121CRRV	58-03-28	954	2340.00	319	7.7	14.5
				121CRRV	59-11-00	954	--	307	7.8	--
15/46E-20P01	46 46 03	117 02 46	01	--	55-03-29	250	--	597	7.4	--
16/43E-07K01	46 53 24	117 25 38	01	--	70-12-02	190	--	267	7.3	10.6
16/43E-14N02	46 52 18	117 22 13	01	--	59-11-00	750	--	285	7.9	--
16/45E-16F01	46 52 35	117 08 54	01	122WNPM	82-06-22	170	2610.00	277	7.4	12.8
17/40E-08H01	46 58 57	117 47 24	01	--	70-12-02	102	--	371	7.9	10.8
18/45E-01L02	47 05 09	117 04 38	01	--	71-09-29	419	--	272	7.2	19.6
19/44E-21M01	47 07 35	117 16 37	01	122CRRV	82-06-21	325	2520.00	222	6.9	10.8
20/43E-10R01	47 14 29	117 22 06	01	122GRRD	62-05-01	308	2225.00	392	7.3	11.1

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
13/40E-09F02	69-08-08	--	143	0	36	13	15	18	.6	5.3
14/42E-13B01	69-08-21	--	180	0	44	17	19	18	.6	3.9
14/43E-19J01	72-03-03	--	115	0	31	9.2	9.9	15	.4	4.0
14/44E-14P01	71-09-29	--	119	0	23	15	23	29	.9	3.3
14/44E-14P02	82-06-21	<1	109	0	24	12	18	26	.8	2.3
14/45E-05D01	46-08-16	--	113	0	22	14	28	35	1.2	2.4
14/45E-05D03	55-03-30	--	113	0	24	13	--	--	--	--
	59-11-17	--	117	0	22	15	22	28	.9	4.2
	82-06-22	<1	128	0	25	16	23	27	.9	4.5
14/45E-05D04	55-03-30	--	113	0	22	14	--	--	--	--
14/45E-05E01	55-03-30	--	108	0	22	13	--	--	--	--
14/45E-05F02	38-12-02	--	121	0	22	16	22	28	.9	4.2
14/45E-05F03	55-03-28	--	124	0	25	15	--	--	--	--
14/45E-05G01	55-03-28	--	114	0	21	15	--	--	--	--
14/45E-08E01	82-06-22	<1	118	0	24	14	20	26	.8	3.6
14/44E-19M01	82-06-21	<1	156	0	36	16	14	16	.5	3.0
15/44E-15A02	58-03-28	--	158	18	42	13	17	19	.6	2.4
	59-11-17	--	167	0	42	15	18	19	.6	1.7
15/45E-07P03	82-06-21	<1	107	0	27	9.5	10	17	.4	1.5
15/45E-26K01	55-03-30	--	99	0	24	9.4	--	--	--	--
	61-05-01	--	150	4	32	17	32	31	1.2	5.6
15/45E-29G02	70-12-02	--	118	0	24	14	22	28	.9	4.0
15/45E-29G03	82-06-21	<1	157	5	30	20	24	24	.9	4.5
15/45E-32N01	55-03-30	--	110	0	21	14	--	--	--	--
15/45E-32N02	58-03-28	--	117	0	22	15	25	31	1.0	4.4
	59-11-00	--	113	0	24	13	22	29	.9	4.1
15/46E-20P01	55-03-29	--	244	106	58	24	--	--	--	--
16/43E-07K01	70-12-02	--	105	0	28	8.6	13	21	.6	1.9
16/43E-14N02	59-11-00	--	98	0	21	11	24	34	1.1	3.5
16/45E-16F01	82-06-22	<1	118	0	24	14	13	19	.5	3.0
17/40E-08H01	70-12-02	--	148	0	38	13	20	22	.7	4.5
18/45E-01L02	71-09-29	--	103	0	23	11	18	27	.8	4.1
19/44E-21M01	82-06-21	<1	96	0	26	7.6	11	20	.5	1.8
20/43E-10R01	62-05-01	--	151	0	34	16	25	26	.9	2.2

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CaCO3)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
13/40E-09F02	69-08-09	187	--	0	--	153	--	10	8.0	.5
14/42E-13B01	69-08-21	252	--	0	--	207	--	8.0	4.0	.3
14/43E-19J01	72-03-03	149	--	0	--	122	--	11	4.0	.3
14/44E-14P01	71-09-29	172	--	17	--	169	--	2.8	2.5	--
14/44E-14P02	82-06-21	--	177	--	.0	--	144	6.0	2.1	.4
14/45E-05D01	46-08-16	209	--	--	--	171	--	1.8	2.0	.4
14/45E-05D03	55-03-30	190	--	4	--	162	--	3.7	4.0	--
	59-11-17	196	--	0	--	161	--	3.1	4.2	.5
	82-06-22	--	206	--	.0	--	167	8.0	4.9	.4
14/45E-05D04	55-03-30	185	--	0	--	152	--	12	5.0	--
14/45E-05E01	55-03-30	198	--	0	--	162	--	2.1	3.0	--
14/45E-05F02	38-12-02	203	--	0	--	167	--	1.8	3.3	.2
14/45E-05F03	55-03-28	216	--	0	--	177	--	2.9	4.0	--
14/45E-05G01	55-03-28	203	--	0	--	167	--	2.9	3.0	--
14/45E-08E01	82-06-22	--	200	--	.0	--	161	6.0	2.6	.4
14/44E-19M01	82-06-21	--	215	--	.0	--	170	11	4.0	.3
15/44E-15A02	58-03-28	171	--	0	--	140	--	22	13	.2
	59-11-17	192	--	0	--	157	--	18	12	.5
15/45E-07D03	82-06-21	--	158	--	.0	--	127	6.0	.9	.2
15/45E-26K01	55-03-30	154	--	0	--	126	--	23	3.0	--
	61-05-01	170	--	4	--	146	--	72	2.2	.6
15/45E-29G02	70-12-02	195	--	0	--	152	--	7.8	2.8	.4
15/45E-29G03	82-06-21	--	188	--	.0	--	152	59	2.6	.4
15/45E-32N01	55-03-30	184	--	6	--	161	--	.8	4.0	--
15/45E-32N02	59-03-28	207	--	0	--	170	--	4.9	2.0	.4
	59-11-00	194	--	0	--	159	--	.7	3.2	1.4
15/44E-20P01	55-03-29	168	--	0	--	138	--	21	29	--
16/43E-07K01	70-12-02	157	--	0	--	129	--	1.0	1.8	.2
16/43E-14N02	59-11-00	173	--	0	--	142	--	7.7	2.2	.5
16/45E-16F01	82-06-22	--	183	--	.0	--	144	7.0	2.3	.4
17/40E-08H01	70-12-02	220	--	0	--	180	--	7.8	4.8	.3
18/45E-01L02	71-09-29	163	--	0	--	134	--	6.3	4.7	.3
19/44E-21M01	82-06-21	--	131	--	.0	--	107	8.0	2.9	.3
20/43E-10R01	62-05-01	196	--	0	--	161	--	15	8.5	.5

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
13/40E-09F02	69-08-08	53	241	233	5.0	--	--
14/42E-13R01	69-08-21	52	266	272	8.1	--	--
14/43E-19J01	72-03-03	48	--	191	--	1.7	--
14/44E-14P01	71-09-29	64	--	253	--	.10	--
14/44E-14P02	82-06-21	58	--	210	--	--	.12
14/45E-05D01	46-08-16	58	211	231	--	--	--
14/45E-05D03	55-03-30	--	--	--	--	--	--
	59-11-17	49	225	236	.20	--	--
	82-06-22	62	--	245	--	--	<.10
14/45E-05D04	55-03-30	--	--	--	--	--	--
14/45E-05E01	55-03-30	--	--	--	--	--	--
14/45E-05F02	39-12-02	45	224	234	.20	--	--
14/45E-05F03	55-03-28	--	--	--	--	--	--
14/45E-05G01	55-03-28	--	--	--	--	--	--
14/45E-08E01	82-06-22	63	--	232	--	--	<.10
14/46E-19M01	82-06-21	47	--	239	--	--	<.10
15/44E-15A02	58-03-28	50	243	244	22	--	--
	59-11-17	46	278	248	23	--	--
15/45E-07R03	82-06-21	55	--	188	--	--	.20
15/45E-26K01	55-03-30	--	--	--	--	--	--
	61-05-01	26	276	279	.70	--	--
15/45E-29G02	70-12-02	55	226	221	8.2	--	--
15/45E-29G03	82-06-21	63	--	290	--	--	<.10
15/45E-32H01	55-03-30	--	--	--	--	--	--
15/45E-32H02	58-03-28	47	236	242	.10	--	--
	59-11-00	60	224	224	.10	--	--
15/46E-20P01	55-03-29	--	--	--	--	--	--
16/43E-07K01	70-12-02	44	184	176	4.5	--	--
16/43E-14N02	59-11-00	63	217	218	.20	--	--
16/45E-16F01	82-06-22	57	--	211	--	--	<.10
17/40E-08H01	70-12-02	37	238	234	2.0	--	--
18/45E-01L02	71-09-29	56	242	204	--	.17	--
19/44E-21M01	82-06-21	54	--	176	--	--	2.0
20/43E-10R01	62-05-01	46	--	244	15	--	--

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
13/40E-09F02	69-09-08	10	--	50	--
14/42E-13R01	69-09-21	530	--	80	--
14/43E-19J01	72-03-03	40	--	<50	--
14/44E-14P01	71-09-29	40	--	60	--
14/44E-14P02	82-06-21	--	5	--	6
14/45E-05D01	46-08-16	500	--	--	--
14/45E-05D03	55-03-30	190	--	--	--
	59-11-17	390	--	--	--
	82-06-22	--	220	--	46
14/45E-05D04	55-03-30	20	--	--	--
14/45E-05F01	55-03-30	220	--	--	--
14/45E-05F02	38-12-02	240	--	--	--
14/45E-05F03	55-03-28	30	--	--	--
14/45E-05G01	55-03-28	210	--	--	--
14/45E-08E01	82-06-22	--	330	--	44
14/46E-19M01	82-06-21	--	1900	--	200
15/44E-15A02	58-03-28	90	--	--	--
	59-11-17	810	--	--	--
15/45E-07R03	82-06-21	--	<3	--	1
15/45E-26K01	55-03-30	670	--	--	--
	51-05-01	80	--	--	--
15/45E-29G02	70-12-02	110	--	<20	--
15/45E-29G03	82-06-21	--	180	--	71
15/45E-32N01	55-03-30	320	--	--	--
15/45E-32N02	58-03-28	500	--	--	--
	59-11-00	360	--	--	--
15/46E-20P01	55-03-29	250	--	--	--
16/43E-07K01	70-12-02	40	--	<20	--
16/43E-14N02	59-11-00	90	--	--	--
16/45E-16F01	82-06-22	--	500	--	47
17/40E-08H01	70-12-02	40	--	<20	--
18/45E-01L02	71-09-29	190	--	30	--
19/44E-21M01	82-06-21	--	3	--	2
20/43E-10R01	62-05-01	50	--	--	--

TABLE 2.--Continued
BLUE MOUNTAINS

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)
08/45E-26K01	46 08 20	117 07 53	01	--	61-05-01	100	--	210	8.1	11.0
08/45E-26P01	46 08 04	117 08 04	01	--	71-09-30	100	--	292	8.2	9.0
08/45E-35R01	46 08 00	117 07 58	01	122YKIM	82-06-21	164	3610.00	258	7.7	19.6
10/46E-05Q01	46 22 12	117 03 52	01	--	59-10-28	1815	--	248	8.4	23.5
10/46E-16Q01	46 20 27	117 02 41	01	--	70-12-02	522	--	204	8.2	18.7
10/46E-20A02	46 20 12	117 03 36	01	122GDRD	82-06-21	295	780.00	335	7.5	18.4
10/46E-21Q01	46 20 14	117 03 17	01	122GDRD	82-06-21	539	790.00	200	7.7	21.9
11/46E-30Q01	46 23 48	117 05 04	01	121CRRV	62-10-30	1330	--	303	8.2	23.3
11N/46E-32E01	46 23 29	117 04 27	01	122GDRD	82-06-21	1340	1180.00	238	7.7	25.6

LOCAL IDENTIFIER	DATE OF SAMPLE	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
08/45E-26K01	61-05-01	--	90	0	18	11	10	19	.5	2.7
08/45E-26P01	71-09-30	--	117	0	22	15	15	21	.6	3.9
08/45E-35R01	82-06-21	<1	111	0	23	13	12	19	.5	3.1
10/46E-05Q01	59-10-28	--	17	0	6.5	.2	42	75	4.7	8.9
10/46E-16Q01	70-12-02	--	55	0	16	3.7	17	36	1.0	8.7
10/46E-20A02	82-06-21	<1	128	0	33	11	20	24	.8	7.6
10/46E-21Q01	82-06-21	<1	61	0	18	3.9	15	30	.9	11
11/46E-30Q01	62-10-30	--	32	0	11	1.0	49	78	4.0	11
11N/46E-32E01	82-06-21	<1	56	0	19	2.1	32	58	1.9	10

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE FET-FLD (MG/L AS HCO3)	BICARBONATE IT-FLD (MG/L AS HCO3)	CARBONATE FET-FLD (MG/L AS CO3)	CARBONATE IT-FLD (MG/L AS CO3)	ALKALINITY FIELD (MG/L AS CACO3)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
08/45E-26K01	61-05-01	130	--	0	--	107	--	5.2	.8	.3
08/45E-26P01	71-09-30	161	--	0	--	132	--	28	5.6	.1
08/45E-35R01	82-06-21	--	177	--	.0	--	134	7.0	2.1	.3
10/46E-05Q01	59-10-28	113	--	5	--	101	--	8.9	7.8	1.1
10/46E-16Q01	70-12-02	108	--	0	--	89	--	5.2	5.9	.4
10/46E-20A02	82-06-21	--	173	--	.0	--	132	25	16	.2
10/46E-21Q01	82-06-21	--	115	--	.0	--	92	7.0	6.4	.3
11/46E-30Q01	62-10-30	128	--	2	--	108	--	25	12	.9
11N/46E-32E01	82-06-21	--	129	--	.0	--	98	13	12	.7

TABLE 2.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS NO3)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
08/45E-26K01	61-05-01	30	136	142	.30	--	--
08/45E-26P01	71-09-30	32	200	201	--	.04	--
08/45E-35R01	82-06-21	28	--	174	--	--	.85
10/46E-05Q01	59-10-28	65	199	207	.10	--	--
10/46E-16Q01	70-12-02	60	177	170	.30	--	--
10/46E-20A02	82-06-21	58	--	256	--	--	1.7
10/46E-21D01	82-06-21	66	--	194	--	--	.11
11/45E-30Q01	62-10-30	66	--	243	.00	--	--
11N/46E-32E01	82-06-21	68	--	220	--	--	<.10

LOCAL IDENTIFIER	DATE OF SAMPLE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
08/45E-26K01	61-05-01	180	--	--	--
08/45E-26P01	71-09-30	90	--	110	--
08/45E-35R01	82-06-21	--	4	--	18
10/46E-05Q01	59-10-28	40	--	--	--
10/46E-16Q01	70-12-02	30	--	<20	--
10/46E-20A02	82-06-21	--	3	--	<1
10/46E-21D01	82-06-21	--	8	--	2
11/46E-30Q01	62-10-30	10	--	--	--
11N/46E-32E01	82-06-21	--	9	--	13

TABLE 3.--Ground-water quality data--trace metals concentrations, by subregion

EXPLANATION OF GEOLOGIC UNITS

Geologic unit codes used in this table indicate that wells are open to one or more of the following formations.

Geologic Unit Code		Formation
Basalt units:		
110	BSLT	Quaternary Basalt
122	SDLM	Saddle Mountains Basalt
122	YKIM	Saddle Mountains and Wanapum Basalts
122	WWPM	Wanapum Basalt
121, 122	CBRV	Wanapum and Grande Ronde Basalts
122	GDRD	Gronde Ronde Basalt
Unconsolidated units:		
110	ALVM	Alluvium
112	GLCV	Glaciofluvial Deposits
112	SCBD	Scabland Flood Deposits
121, 122	ELBG	Ellensburg Formation
124	RSLN	Roslyn Formation

TABLE 3.--Continued

UPPER YAKIMA

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
17/19E-05401	46 59 20	120 29 30	01	112GLCV	82-06-08	69	1585.00	--	<10	<1
18/18E-25D01	47 01 41	120 32 04	01	--	70-12-03	730	--	<10	--	--
20/17E-11C01	47 14 45	121 11 15	01	112GLCV	82-06-07	65	2190.00	--	<10	<1

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
17/19E-05401	82-06-08	32	<1	<10	39	<1	<.1	<1	<1	180
18/18E-25D01	70-12-03	--	--	<30	<50	<100	--	--	--	50
20/17E-11C01	82-06-07	4	<1	<10	3	2	<.1	<1	<1	36

TABLE 3.--Continued

LOWER YAKIMA

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
08/22E-12N01	46 11 09	120 00 24	01	122YKIM	82-06-10	500	775.00	--	<10	5
08/24E-02J01	46 12 26	119 46 20	01	--	70-10-09	760	--	<10	--	--
08/24E-02Q01	46 12 14	119 46 30	01	--	70-09-28	744	--	<10	--	--
08/28E-06J01	46 12 36	119 21 21	01	--	71-09-23	332	700.00	20	--	--
08/29E-17G02	46 10 40	119 12 30	01	122SDLM	82-06-25	245	770.00	--	10	5
08/29E-22A01	46 10 13	119 09 27	01	--	70-11-17	802	--	20	--	--
09/19E-20LD1	46 15 03	120 28 13	01	121YKIM	73-06-20	698	1317.00	--	--	--
09/23E-23G01	46 15 08	119 54 07	01	--	70-10-07	1148	--	<10	--	--
09/27E-07D01	46 17 11	119 29 19	01	122SDLM	82-06-25	360	590.00	--	<10	7
09/28E-17A01	46 16 13	119 19 36	01	122YKIM	82-06-24	1105	565.00	--	<10	<1
10/16E-20E01D1	46 20 30	120 51 10	01	122GDRD	71-02-09	425	1550.00	20	--	--
10/20E-09A01	46 22 26	120 18 56	01	121ELSG	71-02-03	863	757.00	<10	--	--
10/21E-34L01	46 18 37	120 10 39	01	112GLCV	82-06-11	44	691.00	--	<10	1
10/22E-25E01	46 19 30	120 01 07	01	--	70-12-01	461	--	270	--	--
				--	71-05-18	461	--	<10	--	--
10/22E-25F02	46 19 37	120 00 35	01	122WNPM	70-10-06	1162	--	<10	--	--
				122WNPM	70-12-01	1162	--	270	--	--
11/20E-02H01	46 28 10	120 16 28	01	122SDLM	82-06-10	675	1270.00	--	<10	<1
11/20E-36B01	46 24 12	120 15 29	01	--	70-12-01	281	--	<10	--	--
11/24E-14N01	46 25 55	119 47 00	01	--	70-11-13	407	--	<10	--	--
11/26E-34R01	46 23 28	119 32 01	01	--	70-11-19	1000	--	350	--	--
12/17E-16A02	46 32 01	120 41 30	01	121YKIM	71-09-23	868	--	20	--	--
12/18E-06B02	46 33 47	120 36 54	01	112GLCV	82-06-08	70	1250.00	--	<10	<1
12/19E-01E01	46 33 44	120 23 27	01	122ELSG	82-06-08	130	1035.00	--	<10	4
12/19E-01Q01	46 33 06	120 22 55	01	--	62-11-02	1326	--	300	--	--
12/19E-06M04	46 33 21	120 29 58	01	--	71-09-22	315	1000.00	10	--	--
12/23E-28Q01S	46 29 35	119 56 38	01	--	70-09-21	--	--	20	--	--
12/24E-20N01	46 30 24	119 51 12	01	--	70-09-11	1200	--	<10	--	--
13/12E-12M01	46 37 46	121 16 00	01	--	73-04-25	--	--	--	--	--
13/13E-06J01	46 38 33	121 14 45	01	--	73-07-11	--	--	--	--	--
13/18E-21Q01	46 35 39	120 34 45	01	--	71-09-22	260	--	20	--	--
13/24E-25E01	46 35 10	119 46 08	01	--	70-08-27	777	--	90	--	--
13/24E-36D01	46 34 38	119 46 06	01	--	69-05-14	1092	--	100	--	--
14/14E-26G01	46 40 27	121 02 32	01	--	68-04-01	42	--	--	--	<5
14/14E-26K01	46 40 20	121 02 20	01	--	73-07-11	150	--	--	--	--
14/14E-28H01	46 40 26	121 04 45	01	--	73-07-11	101	--	--	--	--
14/15E-24D01	46 41 45	120 54 20	01	121CBRV	68-05-09	60	--	--	--	<5
				121CBRV	73-07-11	60	--	--	--	--
14/18E-36N01	46 39 05	120 31 39	01	--	70-12-01	578	--	<10	--	--
16/12E-23H01	46 51 45	121 18 05	01	--	73-07-17	--	--	--	--	--

TABLE 3.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)
08/22E-12N01	82-06-10	100	<1	<10	1	1	.1
08/24E-02J01	70-10-09	--	--	<30	<50	<100	--
08/24E-02Q01	70-09-28	--	--	<30	<50	<100	--
08/28E-06J01	71-09-23	--	--	<30	<50	<100	--
08/29E-17G02	82-06-25	45	<1	<10	46	2	<.1
08/29E-22A01	70-11-17	--	--	<30	<50	<100	--
09/19E-20L01	73-06-20	--	--	ND	15	<2	--
09/23E-23G01	70-10-07	--	--	<30	<50	<100	--
09/27E-07D01	82-06-25	49	<1	<10	1	<1	.1
09/28E-17A01	82-06-24	98	<1	<10	<1	2	<.1
10/16E-20E01D1	71-02-09	--	--	<30	<50	<100	--
10/20E-09A01	71-02-03	--	--	<30	<50	<100	--
10/21E-34L01	82-06-11	15	<1	<10	10	<1	<.1
10/22E-25E01	70-12-01	--	--	<30	<50	<100	--
	71-05-18	--	--	<30	<50	<100	--
10/22E-25F02	70-10-06	--	--	<30	<50	<100	--
	70-12-01	--	--	<30	<50	<100	--
11/20E-02H01	82-06-10	3	<1	<10	1	<1	<.1
11/20E-36B01	70-12-01	--	--	<30	<50	<100	--
11/24E-14N01	70-11-13	--	--	<30	<50	<100	--
11/26E-34R01	70-11-19	--	--	<30	<50	<100	--
12/17E-16A02	71-09-23	--	--	<30	<50	<100	--
12/18E-06B02	82-06-08	63	<1	<10	19	2	<.1
12/19E-01E01	82-06-08	94	<1	<10	1	1	.1
12/19E-01Q01	62-11-02	--	--	--	--	--	--
12/19E-06M04	71-09-22	--	--	<30	<50	<100	--
12/23E-28Q01S	70-09-21	--	--	<30	<50	<100	--
12/24E-20N01	70-09-11	--	--	<30	<50	<100	--
13/12E-12M01	73-04-25	--	--	--	8	--	--
13/13E-06J01	73-07-11	--	--	--	<20	--	--
13/18E-21Q01	71-09-22	--	--	<30	<50	<100	--
13/24E-25E01	70-08-27	--	--	<30	<50	<100	--
13/24E-36D01	69-05-14	--	--	<30	--	--	--
14/14E-26G01	68-04-01	--	--	--	--	--	--
14/14E-26K01	73-07-11	--	--	--	ND	--	--
14/14E-28H01	73-07-11	--	--	--	ND	--	--
14/15E-24D01	68-05-09	--	--	--	--	--	--
	73-07-11	--	--	--	<2	--	--
14/18E-36N01	70-12-01	--	--	<30	<50	<100	--
16/12E-23H01	73-07-17	--	--	--	30	--	--

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
08/22E-12N01	82-06-10	18	<1	--	37
08/24E-02J01	70-10-09	--	--	--	<10
08/24E-02Q01	70-09-28	--	--	--	<10
08/28E-06J01	71-09-23	--	--	--	<10
08/29E-17G02	82-06-25	<1	<1	--	99
08/29E-22A01	70-11-17	--	--	--	<10
09/19E-20L01	73-06-20	--	--	--	<20
09/23E-23G01	70-10-07	--	--	--	<10
09/27E-07D01	82-06-25	<1	<1	--	5
09/28E-17A01	82-06-24	<1	<1	--	<3
10/16E-20E01D1	71-02-09	--	--	--	80
10/20E-09A01	71-02-03	--	--	--	<10
10/21E-34L01	82-06-11	<1	<1	--	34
10/22E-25E01	70-12-01	--	--	--	<10
	71-05-18	--	--	--	<10
10/22E-25F02	70-10-08	--	--	--	<10
	70-12-01	--	--	--	<10
11/20E-02H01	82-06-10	<1	<1	--	6
11/20E-36B01	70-12-01	--	--	--	<10
11/24E-14N01	70-11-13	--	--	--	200
11/26E-34R01	70-11-19	--	--	--	<10
12/17E-16A02	71-09-23	--	--	--	<10
12/18E-06B02	82-06-08	<1	<1	--	27
12/19E-01E01	82-06-08	<1	<1	--	14
12/19E-01Q01	62-11-02	--	--	--	--
12/19E-06M04	71-09-22	--	--	--	<10
12/23E-28Q01S	70-09-21	--	--	--	800
12/24E-20N01	70-09-11	--	--	--	<10
13/12E-12M01	73-04-25	--	--	--	20
13/13E-06J01	73-07-11	--	--	--	<20
13/18E-21Q01	71-09-22	--	--	--	<10
13/24E-25E01	70-08-27	--	--	--	<10
13/24E-36D01	69-05-14	--	--	--	--
14/14E-26G01	68-04-01	--	--	--	--
14/14E-26K01	73-07-11	--	--	--	230
14/14E-28H01	73-07-11	--	--	--	2500
14/15E-24D01	68-05-09	--	--	--	--
	73-07-11	--	--	--	90
14/18E-36N01	70-12-01	--	--	--	<10
16/12E-23H01	73-07-17	--	--	--	7800

TABLE 3.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
16/14E-01F01	46 54 25	121 01 32	01	--	73-06-07	--	--	--	--	--
16/14E-01F02	46 54 29	121 01 37	01	--	68-01-11	46	--	--	--	<5
16/14E-01J01	46 54 11	121 00 55	01	--	73-06-07	200	--	--	--	--
17/11E-35R01	46 54 56	121 22 57	01	--	73-04-25	--	--	--	--	--
17/13E-12K01	46 58 34	121 09 32	01	--	68-05-12	77	--	--	--	<5
17/13E-18G01	46 57 54	121 15 58	01	--	73-06-07	33	--	--	--	--
17/13E-27N01	46 55 36	121 12 47	01	--	73-04-24	--	--	--	--	--
17/14E-04K01	46 59 27	121 05 48	01	--	73-07-17	--	--	--	--	--
17/14E-07C01	46 58 50	121 08 35	01	--	73-04-24	--	--	--	--	--
17/14E-09K01	46 58 29	121 05 41	01	--	68-02-29	40	--	--	--	<5
				--	73-06-07	60	--	--	--	--
17/14E-15M01	46 57 43	121 04 57	01	--	73-07-17	--	--	--	--	--
18/14E-32D01	47 00 38	121 07 46	01	--	68-05-01	70	--	--	--	<5
				--	73-06-07	70	--	--	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)
16/14E-01F01	73-06-07	--	--	--	<20	3	--
16/14E-01F02	68-01-11	--	--	--	--	--	--
16/14E-01J01	73-06-07	--	--	--	<20	ND	--
17/11E-35R01	73-04-25	--	--	--	<20	--	--
17/13E-12K01	68-05-12	--	--	--	--	--	--
17/13E-18G01	73-06-07	--	--	--	5	2	--
17/13E-27N01	73-04-24	--	--	--	<20	--	--
17/14E-04K01	73-07-17	--	--	--	2	--	--
17/14E-07C01	73-04-24	--	--	--	<20	--	--
17/14E-09K01	68-02-29	--	--	--	--	--	--
	73-06-07	--	--	--	2	<2	--
17/14E-15M01	73-07-17	--	--	--	30	--	--
18/14E-32D01	68-05-01	--	--	--	--	--	--
	73-06-07	--	--	--	7	ND	--

LOCAL IDENTIFIER	DATE OF SAMPLE	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
16/14E-01F01	73-06-07	--	--	--	--
16/14E-01F02	68-01-11	--	--	--	--
16/14E-01J01	73-06-07	--	--	--	--
17/11E-35R01	73-04-25	--	--	--	120
17/13E-12K01	68-05-12	--	--	7300	--
17/13E-18G01	73-06-07	--	--	--	--
17/13E-27N01	73-04-24	--	--	--	160
17/14E-04K01	73-07-17	--	--	--	20
17/14E-07C01	73-04-24	--	--	--	80
17/14E-09K01	68-02-29	--	--	--	--
	73-06-07	--	--	--	--
17/14E-15M01	73-07-17	--	--	--	830
18/14E-32D01	68-05-01	--	--	--	--
	73-06-07	--	--	--	--

TABLE 3.--Continued
HANFORD

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
10/28E-02D01	46 23 06	119 16 44	01	--	81-04-21	80	394.55	--	--	7
10/28E-03P01	46 22 25	119 17 40	01	112GLCV	82-04-19	65	--	--	--	8
10/28E-11C03	46 22 24	119 16 26	01	--	77-04-25	102	375.00	--	20	2
10/28E-11F03	46 22 06	119 16 23	01	--	77-04-25	40	378.00	--	20	1
10/28E-14C01	46 21 19	119 16 17	01	112GLCV	82-04-19	80	400.39	--	--	3
10/28E-14D01	46 21 26	119 16 47	01	--	76-04-05	79	388.00	--	10	6
11/26E-01F01	46 28 12	119 31 27	01	112GLCV	82-04-21	209	577.61	--	--	3
11/27E-02D01	46 27 32	119 23 35	01	--	76-04-05	200	522.00	--	20	8
11/27E-14C01	46 26 36	119 23 54	01	112GLCV	82-04-20	350	537.68	--	--	6
11/27E-17R01	46 26 41	119 27 31	01	112GLCV	79-04-16	466	537.00	--	--	7
				112GLCV	82-04-20	466	536.37	--	--	6
11/27E-22D01	46 25 52	119 25 24	01	112GLCV	74-11-20	174	523.50	270	--	<8
				112GLCV	82-04-20	174	523.50	--	--	6
11/27E-26C01	46 25 00	119 24 01	01	--	77-04-25	143	504.00	--	10	9
				--	79-04-20	143	504.00	--	--	13
11/28E-03R01	46 27 57	119 16 50	01	112GLCV	82-04-19	368	430.86	--	--	9
11/28E-04P01	46 27 47	119 19 00	01	--	75-06-12	454	--	--	--	10
11/28E-05C01	46 28 26	119 19 59	01	--	78-04-19	245	442.00	--	--	14
11/28E-09R01	46 26 48	119 18 07	01	--	77-04-25	95	440.00	--	10	7
11/28E-17D01	46 26 34	119 20 21	01	--	74-11-19	147	--	7	--	14
11/28E-18M01	46 26 19	119 21 37	01	--	78-04-19	294	547.00	--	--	8
11/28E-21K01	46 25 18	119 18 40	01	--	75-06-13	142	--	--	--	1
11/28E-23D01	46 25 52	119 15 41	01	112GLCV	76-04-05	260	398.00	--	40	16
				112GLCV	82-04-19	260	397.90	--	--	7
11/28E-27R01	46 24 20	119 16 50	01	--	74-11-19	282	--	52	--	12
11/28E-29P01	46 24 20	119 20 12	01	112GLCV	77-04-25	110	435.00	--	<100	5
				112GLCV	82-04-19	110	435.50	--	--	6
12/25E-03D03	46 33 34	119 40 40	01	--	81-04-22	203	643.90	--	--	<1
12/25E-11F01	46 32 33	119 39 09	01	--	80-04-22	440	636.80	--	--	2
12/25E-11R01	46 32 12	119 38 13	01	--	77-04-28	279	661.00	--	<100	3
12/25E-13E01	46 36 45	119 37 45	01	--	80-04-22	290	653.70	--	--	5
12/26E-04N01	46 33 00	119 34 14	01	--	77-04-27	384	748.00	--	<100	2
12/26E-07R01	46 32 42	119 35 19	01	--	76-04-08	413	711.00	--	10	2
12/26E-07Q01	46 32 07	119 35 16	01	--	76-04-08	325	694.00	--	10	1
12/26E-08P01	46 32 11	119 35 17	01	--	78-04-18	322	726.00	--	--	4
				--	79-04-19	322	726.00	--	--	4
12/26E-09L01	46 32 25	119 34 09	01	--	79-04-17	354	748.00	--	--	6
12/26E-12H01	46 32 28	119 29 47	01	--	76-04-08	517	690.00	--	10	6
12/26E-13A01	46 32 00	119 29 32	01	112GLCV	76-04-08	145	540.00	--	20	4
				112GLCV	82-04-21	145	540.20	--	--	6

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
10/28E-02D01	81-04-21	--	--	--	--	--	--	<1	--	--
10/28E-03P01	82-04-19	--	--	--	--	--	--	2	--	--
10/28E-11C03	77-04-25	--	<100	--	ND	--	ND	0	--	<2
10/28E-11F03	77-04-25	--	<100	--	ND	--	<20	0	--	<2
10/28E-14C01	82-04-19	--	--	--	--	--	--	<1	--	--
10/28E-14D01	76-04-05	--	60	--	<2	--	<6	1	--	ND
11/26E-01F01	82-04-21	--	--	--	--	--	--	<1	--	--
11/27E-02Q01	76-04-05	--	40	--	ND	--	<6	6	--	ND
11/27E-14C01	82-04-20	--	--	--	--	--	--	7	--	--
11/27E-17B01	79-04-16	--	--	--	--	--	--	0	--	--
	82-04-20	--	--	--	--	--	--	<1	--	--
11/27E-22D01	74-11-20	62	--	<9	--	<20	<20	0	11	12
	82-04-20	--	--	--	--	--	--	<1	--	--
11/27E-26C01	77-04-25	--	<100	--	ND	--	ND	0	--	ND
	79-04-20	--	--	--	--	--	--	0	--	--
11/28E-03R01	82-04-19	--	--	--	--	--	--	2	--	--
11/28E-04P01	75-06-12	--	--	--	--	--	ND	0	--	6
11/28E-05C01	78-04-19	--	--	--	--	--	--	0	--	ND
11/28E-09R01	77-04-25	--	<100	--	ND	--	ND	0	--	ND
11/28E-17D01	74-11-19	50	--	12	--	4	ND	3	<20	8
11/28E-18M01	78-04-19	--	--	--	--	--	--	7	--	ND
11/28E-21K01	75-06-13	--	--	--	--	--	<20	0	--	ND
11/28E-23D01	76-04-05	--	20	--	ND	--	<4	0	--	ND
	82-04-19	--	--	--	--	--	--	2	--	--
11/28E-27R01	74-11-19	53	--	<20	--	8	ND	0	7	8
11/28E-29P01	77-04-25	--	<100	--	ND	--	ND	1	--	ND
	82-04-19	--	--	--	--	--	--	2	--	--
12/25E-03D03	81-04-22	--	--	--	--	--	--	<1	--	--
12/25E-11F01	80-04-22	--	--	--	--	--	--	<1	--	--
12/25E-11R01	77-04-28	--	<100	--	ND	--	ND	0	--	ND
12/25E-13E01	80-04-22	--	--	--	--	--	--	<1	--	--
12/26E-04N01	77-04-27	--	<100	--	ND	--	ND	0	--	ND
12/26E-07B01	76-04-08	--	<100	--	ND	--	<20	0	--	ND
12/26E-07D01	76-04-08	--	50	--	ND	--	<2	2	--	<2
12/26E-08P01	78-04-18	--	--	--	--	--	--	21	--	ND
	79-04-19	--	--	--	--	--	--	21	--	--
12/26E-09L01	79-04-17	--	--	--	--	--	--	0	--	--
12/26E-12H01	76-04-08	--	40	--	ND	--	<6	0	--	ND
12/26E-13A01	76-04-08	--	50	--	<2	--	<7	0	--	2
	82-04-21	--	--	--	--	--	--	<1	--	--

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
10/28E-02D01	81-04-21	--	--	2	--	--	--	--
10/28E-03P01	82-04-19	--	--	1	--	--	--	--
10/28E-11C03	77-04-25	--	ND	<1	--	ND	--	20
10/28E-11F03	77-04-25	--	2	2	--	ND	--	<20
10/28E-14C01	82-04-19	--	--	<1	--	--	--	--
10/28E-14D01	76-04-05	--	7	<1	--	<2	--	<20
11/26E-01F01	82-04-21	--	--	1	--	--	--	--
11/27E-02Q01	76-04-05	--	<6	1	--	<2	--	120
11/27E-14C01	82-04-20	--	--	4	--	--	--	--
11/27E-17B01	79-04-16	--	--	3	--	--	--	--
	82-04-20	--	--	4	--	--	--	--
11/27E-22D01	74-11-20	30	--	1	<0	--	30	--
	82-04-20	--	--	6	--	--	--	--
11/27E-26C01	77-04-25	--	ND	1	--	ND	--	8
	79-04-20	--	--	<1	--	--	--	--
11/28E-03R01	82-04-19	--	--	3	--	--	--	--
11/28E-04P01	75-06-12	--	--	<1	--	--	--	--
11/28E-05C01	78-04-19	--	--	1	--	--	--	--
11/28E-09R01	77-04-25	--	ND	2	--	ND	--	<20
11/28E-17D01	74-11-19	10	--	3	<0	--	<20	--
11/28E-18M01	78-04-19	--	--	2	--	--	--	--
11/28E-21K01	75-06-13	--	--	2	--	--	--	--
11/28E-23D01	76-04-05	--	3	1	--	<2	--	ND
	82-04-19	--	--	3	--	--	--	--
11/28E-27R01	74-11-19	17	--	1	<0	--	30	--
11/28E-29P01	77-04-25	--	ND	2	--	ND	--	70
	82-04-19	--	--	2	--	--	--	--
12/25E-03D03	81-04-22	--	--	3	--	--	--	--
12/25E-11F01	80-04-22	--	--	10	--	--	--	--
12/25E-11R01	77-04-28	--	ND	<1	--	ND	--	8
12/25E-13E01	80-04-22	--	--	1	--	--	--	--
12/26E-04N01	77-04-27	--	ND	1	--	ND	--	6
12/26E-07B01	76-04-08	--	<10	5	--	<2	--	20
12/26E-07Q01	76-04-08	--	<8	5	--	<2	--	40
12/26E-08P01	78-04-18	--	--	5	--	--	--	--
	79-04-19	--	--	4	--	--	--	--
12/26E-09L01	79-04-17	--	--	3	--	--	--	--
12/26E-12H01	76-04-08	--	<6	1	--	<2	--	20
12/26E-13A01	76-04-08	--	<7	1	--	<2	--	20
	82-04-21	--	--	2	--	--	--	--

TABLE 3.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
12/26E-13H01	46 31 46	119 29 39	01	--	75-06-12	126	516.00	--	--	1
				--	76-04-06	126	516.00	--	20	1
				--	77-04-26	126	516.00	--	<100	1
				--	78-04-20	126	516.00	--	--	6
				--	79-04-17	126	516.00	--	--	5
12/26E-14D01	46 32 00	119 31 50	01	--	78-04-20	385	737.00	--	--	6
12/26E-15C01	46 31 55	119 32 52	01	--	74-11-20	440	--	90	--	5
				--	76-04-09	440	717.00	--	10	2
				--	77-04-28	440	717.00	--	<100	2
				--	78-04-20	440	717.00	--	--	6
				--	79-04-20	440	717.00	--	--	6
12/26E-15J01	46 31 33	119 32 15	01	--	79-04-20	320	708.00	--	--	6
12/26E-18E01	46 31 43	119 36 45	01	--	76-04-08	580	668.00	--	10	<1
12/26E-18G01	46 31 44	119 36 23	01	112GLCV	78-04-18	280	667.00	--	--	5
				112GLCV	79-04-19	280	667.00	--	--	5
				112GLCV	82-04-21	280	667.00	--	--	4
12/26E-22L01	46 30 35	119 32 45	01	--	80-04-24	315	676.60	--	--	3
12/26E-24N01	46 30 21	119 30 36	01	--	81-04-21	680	591.47	--	--	1
12/26E-25Q01	46 29 28	119 29 51	01	--	77-04-28	202	573.00	--	<100	2
				--	81-04-23	202	573.00	--	--	4
12/27E-01G01	46 33 21	119 22 21	01	112GLCV	74-11-19	350	514.27	10	--	8
				112GLCV	80-04-21	350	514.30	--	--	5
				112GLCV	82-04-19	350	514.27	--	--	5
12/27E-03N01	46 27 41	119 25 31	01	--	76-04-07	--	509.00	--	20	7
12/27E-03Q01	46 33 04	119 25 04	01	--	75-06-12	120	--	--	--	2
				--	80-04-23	120	466.50	--	--	<1
12/27E-05Q01	46 33 01	119 27 32	01	--	77-04-26	283	518.00	--	10	9
12/27E-05R01	46 32 40	119 27 09	01	--	75-06-13	204	554.00	--	--	1
12/27E-15S01	46 31 38	119 24 48	01	--	75-06-12	171	518.00	--	--	3
				--	76-04-06	171	518.00	--	10	2
				--	77-04-26	171	518.00	--	<100	3
				--	78-04-19	171	518.00	--	--	5
				--	79-04-16	171	518.00	--	--	7
12/27E-16M01	46 31 24	119 26 56	01	--	78-04-19	212	529.00	--	--	9
				--	80-04-24	212	529.30	--	--	4
12/27E-18C01	46 32 00	119 28 55	01	--	79-04-16	167	537.00	--	--	6
12/27E-19D02	46 30 57	119 29 14	01	--	78-04-19	253	559.00	--	--	7
12/27E-20P01	46 29 29	119 27 36	01	--	76-04-06	162	524.00	--	10	4
12/27E-24M01	46 30 35	119 23 04	01	--	76-04-06	350	443.00	--	10	7
12/27E-27R01	46 29 37	119 24 25	01	--	76-04-06	158	506.00	--	10	13

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
12/26F-13H01	75-06-12	--	--	--	--	--	<20	0	--	30
	76-04-06	--	40	--	ND	--	<6	0	--	<2
	77-04-26	--	<100	--	ND	--	ND	0	--	ND
	78-04-20	--	--	--	--	--	--	3	--	ND
	79-04-17	--	--	--	--	--	--	0	--	--
12/26E-14D01	78-04-20	--	--	--	--	--	--	5	--	ND
12/26E-15C01	74-11-20	53	--	140	--	9	ND	0	9	9
	76-04-09	--	70	--	ND	--	<7	1	--	ND
	77-04-28	--	<100	--	ND	--	ND	0	--	ND
	78-04-20	--	--	--	--	--	--	6	--	ND
	79-04-20	--	--	--	--	--	--	0	--	--
12/26E-15J01	79-04-20	--	--	--	--	--	--	0	--	--
12/26E-18E01	76-04-08	--	20	--	ND	--	<5	0	--	ND
12/26E-18G01	78-04-18	--	--	--	--	--	--	55	--	ND
	79-04-19	--	--	--	--	--	--	31	--	--
	82-04-21	--	--	--	--	--	--	30	--	--
12/26E-22L01	80-04-24	--	--	--	--	--	--	<1	--	--
12/26E-24N01	81-04-21	--	--	--	--	--	--	<1	--	--
12/26E-25Q01	77-04-28	--	<100	--	ND	--	ND	0	--	ND
	81-04-23	--	--	--	--	--	--	3	--	--
12/27E-01G01	74-11-19	50	--	<6	--	5	ND	6	2	2
	80-04-21	--	--	--	--	--	--	1	--	--
	82-04-19	--	--	--	--	--	--	7	--	--
12/27E-03N01	76-04-07	--	40	--	ND	--	<6	4	--	ND
12/27E-03Q01	75-06-12	--	--	--	--	--	<20	0	--	ND
	80-04-23	--	--	--	--	--	--	<1	--	--
12/27E-05Q01	77-04-26	--	<100	--	ND	--	ND	0	--	2
12/27E-05R01	75-06-13	--	--	--	--	--	ND	0	--	<2
12/27E-15G01	75-06-12	--	--	--	--	--	<20	0	--	4
	76-04-06	--	50	--	ND	--	<7	3	--	ND
	77-04-26	--	<100	--	ND	--	ND	0	--	<2
	78-04-19	--	--	--	--	--	--	5	--	ND
	79-04-16	--	--	--	--	--	--	0	--	--
12/27E-16N01	78-04-19	--	--	--	--	--	--	5	--	ND
	80-04-24	--	--	--	--	--	--	<1	--	--
12/27E-18C01	79-04-16	--	--	--	--	--	--	0	--	--
12/27E-19D02	78-04-19	--	--	--	--	--	--	3	--	ND
12/27E-20P01	76-04-06	--	50	--	ND	--	<7	4	--	ND
12/27E-24M01	76-04-06	--	70	--	ND	--	<7	5	--	ND
12/27E-27R01	76-04-06	--	90	--	ND	--	<7	4	--	ND

TABLE 3.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
12/26E-13H01	75-06-12	--	--	3	--	--	--	--
	76-04-06	--	<6	1	--	<2	--	<20
	77-04-26	--	ND	1	--	ND	--	<20
	78-04-20	--	--	2	--	--	--	--
	79-04-17	--	--	2	--	--	--	--
12/26E-14D01	78-04-20	--	--	3	--	--	--	--
12/26E-15C01	74-11-20	30	--	2	<0	--	400	--
	76-04-09	--	<7	12	--	<2	--	110
	77-04-28	--	ND	2	--	ND	--	210
	78-04-20	--	--	2	--	--	--	--
	79-04-20	--	--	2	--	--	--	--
12/26E-15J01	79-04-20	--	--	2	--	--	--	--
12/26E-18E01	76-04-08	--	<5	3	--	<2	--	20
12/26E-18G01	78-04-18	--	--	3	--	--	--	--
	79-04-19	--	--	1	--	--	--	--
	82-04-21	--	--	2	--	--	--	--
12/26E-22L01	80-04-24	--	--	3	--	--	--	--
12/26E-24N01	81-04-21	--	--	<1	--	--	--	--
12/26E-25Q01	77-04-28	--	ND	5	--	ND	--	230
	81-04-23	--	--	2	--	--	--	--
12/27E-01G01	74-11-19	2	--	3	<0	--	<20	--
	80-04-21	--	--	3	--	--	--	--
	82-04-19	--	--	3	--	--	--	--
12/27E-03N01	76-04-07	--	<6	6	--	<2	--	ND
12/27E-03Q01	75-06-12	--	--	3	--	--	--	--
	80-04-23	--	--	2	--	--	--	--
12/27E-05Q01	77-04-26	--	ND	<1	--	ND	--	<20
12/27E-05R01	75-06-13	--	--	2	--	--	--	--
12/27E-15G01	75-06-12	--	--	2	--	--	--	--
	76-04-06	--	<7	1	--	<2	--	<20
	77-04-26	--	2	1	--	ND	--	20
	78-04-19	--	--	1	--	--	--	--
	79-04-16	--	--	2	--	--	--	--
12/27E-16M01	78-04-19	--	--	1	--	--	--	--
	80-04-24	--	--	2	--	--	--	--
12/27E-18C01	79-04-16	--	--	1	--	--	--	--
12/27E-19D02	78-04-19	--	--	3	--	--	--	--
12/27E-20P01	76-04-06	--	<7	2	--	<2	--	ND
12/27E-24M01	76-04-06	--	<7	1	--	<2	--	ND
12/27E-27R01	76-04-06	--	<7	1	--	<2	--	30

TABLE 3.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
12/27E-31Q01	46 28 44	119 28 43	01	--	78-04-20	160	515.00	--	--	4
				--	79-04-19	160	515.00	--	--	4
12/27E-33J01	46 28 56	119 25 51	01	112GLCV	76-04-05	350	524.00	--	10	18
				112GLCV	82-04-20	350	523.83	--	--	9
12/27E-35J01	46 28 54	119 23 20	01	112GLCV	75-06-13	163	548.36	--	--	4
				112GLCV	82-04-20	163	548.36	--	--	8
12/28E-05R01	46 33 38	119 19 59	01	112GLCV	82-04-19	95	--	--	--	6
12/28E-05Q01	46 32 56	119 19 41	01	--	75-06-11	420	437.80	--	--	4
				--	80-04-21	420	437.80	--	--	5
12/28E-18D01	46 31 52	119 21 50	01	--	76-04-07	164	500.00	--	30	4
				--	80-04-23	164	499.80	--	--	4
12/28E-19F01	46 30 49	119 21 32	01	--	74-11-19	80	--	6	--	9
				--	76-04-07	80	466.00	--	20	5
				--	77-04-26	80	466.00	--	<100	6
				--	78-04-17	80	466.00	--	--	9
				--	79-04-16	80	466.00	--	--	8
12/28E-19N01	46 30 43	119 20 09	01	--	80-04-23	119	--	--	--	6
12/28E-28D01	46 29 40	119 18 25	01	--	77-04-26	321	467.00	--	<100	5
12/28E-31H01	46 29 06	119 20 46	01	112GLCV	75-06-12	105	433.19	--	--	4
				112GLCV	82-04-20	105	433.19	--	--	3
13/25E-03Q01	46 38 20	119 40 24	01	--	79-04-18	52	437.00	--	--	5
13/25E-11H01	46 37 43	119 38 44	01	--	77-04-27	105	472.00	--	<100	2
13/25E-16J01	46 36 49	119 41 05	01	--	78-04-18	160	510.00	--	--	4
				--	81-04-22	160	509.73	--	--	2
13/25E-23L01	46 35 51	119 39 21	01	--	81-04-22	355	577.96	--	--	1
13/25E-25B01	46 35 31	119 37 40	01	--	78-04-18	192	583.00	--	--	2
				--	80-04-22	192	583.20	--	--	2
				--	81-04-22	192	583.24	--	--	<1
13/25E-26N01	46 34 40	119 39 49	01	--	81-04-23	600	743.00	--	--	2
13/25E-27C01	46 35 30	119 40 35	01	--	80-04-22	235	617.40	--	--	1
13/25E-30G01	46 35 05	119 44 15	01	--	69-05-14	1110	--	100	--	--
				--	70-08-27	1110	--	80	--	--
				--	70-09-08	1110	--	80	--	--
				--	77-04-27	1110	837.00	--	<100	<1
13/25E-36D01	46 34 25	119 38 25	01	--	75-06-11	280	--	--	--	<1
13/26E-02N01	46 38 10	119 32 00	01	--	81-04-23	210	507.00	--	--	2
13/26E-06N01	46 38 18	119 36 59	01	--	80-04-23	200	482.60	--	--	3
13/26E-08R01	46 37 23	119 34 52	01	--	81-04-22	120	505.92	--	--	6
13/26E-10N01	46 37 15	119 33 19	01	--	81-04-23	115	503.33	--	--	7
13/26E-14B01	46 37 04	119 31 30	01	--	78-04-18	125	467.00	--	--	14

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
12/27E-31Q01	78-04-20	--	--	--	--	--	--	0	--	ND
	79-04-19	--	--	--	--	--	--	0	--	--
12/27E-33J01	76-04-05	--	60	--	ND	--	<6	6	--	ND
	82-04-20	--	--	--	--	--	--	7	--	--
12/27E-35J01	75-06-13	--	--	--	--	--	ND	0	--	<2
	82-04-20	--	--	--	--	--	--	<1	--	--
12/28E-05B01	82-04-19	--	--	--	--	--	--	7	--	--
12/28E-05Q01	75-06-11	--	--	--	--	--	ND	2	--	47
	80-04-21	--	--	--	--	--	--	<1	--	--
12/28E-18D01	76-04-07	--	70	--	ND	--	<6	3	--	<20
	80-04-23	--	--	--	--	--	--	5	--	--
12/28E-19F01	74-11-19	65	--	<6	--	4	ND	3	2	<2
	76-04-07	--	60	--	ND	--	<7	3	--	ND
	77-04-26	--	<100	--	ND	--	ND	4	--	ND
	78-04-17	--	--	--	--	--	--	9	--	ND
	79-04-16	--	--	--	--	--	--	0	--	--
12/28E-19N01	80-04-23	--	--	--	--	--	--	<1	--	--
12/28E-28Q01	77-04-26	--	<100	--	<2	--	ND	0	--	<2
12/28E-31H01	75-06-12	--	--	--	--	--	ND	0	--	ND
	82-04-20	--	--	--	--	--	--	<1	--	--
13/25E-03D01	79-04-18	--	--	--	--	--	--	9	--	--
13/25E-11H01	77-04-27	--	<100	--	ND	--	<20	15	--	ND
13/25E-16J01	78-04-18	--	--	--	--	--	--	0	--	ND
	81-04-22	--	--	--	--	--	--	1	--	--
13/25E-23L01	81-04-22	--	--	--	--	--	--	1	--	--
13/25E-25R01	78-04-18	--	--	--	--	--	--	2	--	ND
	80-04-22	--	--	--	--	--	--	<1	--	--
	81-04-22	--	--	--	--	--	--	<1	--	--
13/25E-26N01	81-04-23	--	--	--	--	--	--	2	--	--
13/25E-27C01	80-04-22	--	--	--	--	--	--	<1	--	--
13/25E-30S01	69-05-14	--	--	--	--	--	<5	--	--	--
	70-08-27	--	--	--	--	--	<30	--	--	<50
	70-09-08	--	--	--	--	--	<30	--	--	<50
	77-04-27	--	<100	--	ND	--	ND	0	--	ND
13/25E-36D01	75-06-11	--	--	--	--	--	ND	0	--	8
13/26E-02N01	81-04-23	--	--	--	--	--	--	16	--	--
13/26E-06N01	80-04-23	--	--	--	--	--	--	<1	--	--
13/26E-08R01	81-04-22	--	--	--	--	--	--	<1	--	--
13/26E-10N01	81-04-23	--	--	--	--	--	--	<1	--	--
13/26E-14R01	78-04-18	--	--	--	--	--	--	0	--	ND

TABLE 3.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
12/27E-31Q01	78-04-20	--	--	<1	--	--	--	--
	79-04-19	--	--	<1	--	--	--	--
12/27E-33J01	76-04-05	--	<6	2	--	<2	--	ND
	82-04-20	--	--	4	--	--	--	--
12/27E-35J01	75-06-13	--	--	7	--	--	--	--
	82-04-20	--	--	11	--	--	--	--
12/28E-05R01	82-04-19	--	--	2	--	--	--	--
12/28E-05Q01	75-06-11	--	--	2	--	--	--	--
	80-04-21	--	--	2	--	--	--	--
12/28E-18D01	76-04-07	--	<6	2	--	<2	--	30
	80-04-23	--	--	2	--	--	--	--
12/28E-19F01	74-11-19	4	--	2	<0	--	120	--
	76-04-07	--	<7	2	--	<2	--	60
	77-04-26	--	2	1	--	ND	--	60
	78-04-17	--	--	2	--	--	--	--
	79-04-16	--	--	2	--	--	--	--
12/28E-19N01	80-04-23	--	--	1	--	--	--	--
12/28E-28Q01	77-04-26	--	ND	2	--	ND	--	8
12/28E-31H01	75-06-12	--	--	3	--	--	--	--
	82-04-20	--	--	--	--	--	--	--
13/25E-03Q01	79-04-18	--	--	1	--	--	--	--
13/25E-11H01	77-04-27	--	ND	1	--	ND	--	9
13/25E-16J01	78-04-18	--	--	1	--	--	--	--
	81-04-22	--	--	<1	--	--	--	--
13/25E-23L01	81-04-22	--	--	<1	--	--	--	--
13/25E-25B01	78-04-18	--	--	<1	--	--	--	--
	80-04-22	--	--	<1	--	--	--	--
	81-04-22	--	--	<1	--	--	--	--
13/25E-26N01	81-04-23	--	--	11	--	--	--	--
13/25E-27C01	80-04-22	--	--	<1	--	--	--	--
13/25E-30G01	69-05-14	--	--	--	--	--	--	--
	70-08-27	--	<100	--	--	--	--	<10
	70-09-08	--	<100	--	--	--	--	<10
	77-04-27	--	ND	<1	--	ND	--	3
13/25E-36D01	75-06-11	--	--	5	--	--	--	--
13/26E-02N01	81-04-23	--	--	2	--	--	--	--
13/26E-06N01	80-04-23	--	--	<1	--	--	--	--
13/26E-08R01	81-04-22	--	--	9	--	--	--	--
13/26E-10N01	81-04-23	--	--	<1	--	--	--	--
13/26E-14R01	78-04-18	--	--	<1	--	--	--	--

TABLE 3.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
13/26E-14A01	46 37 04	119 31 30	01	--	81-04-23	125	467.06	--	--	13
13/26E-22E01	46 34 24	119 34 37	01	--	80-04-22	185	571.70	--	--	4
13/26E-26B03	46 35 28	119 31 28	01	--	78-04-17	60	444.00	--	--	6
				--	81-04-22	60	444.43	--	--	4
13/26E-28M01	46 36 07	119 33 20	01	--	80-04-22	108	497.80	--	--	10
13/26E-31K01	46 34 14	119 36 25	01	--	77-04-27	305	688.00	--	<100	1
13/26E-31R01	46 33 51	119 35 09	01	--	79-04-17	320	725.00	--	--	4
13/26E-34C01	46 34 32	119 32 50	01	112GLCV	74-11-20	149	530.00	<100	--	11
				112GLCV	76-04-08	149	530.00	--	10	4
				112GLCV	77-04-27	149	530.00	--	<100	3
				112GLCV	78-04-17	149	530.00	--	--	11
				112GLCV	79-04-17	149	530.00	--	--	13
				112GLCV	81-04-22	149	530.12	--	--	2
				112GLCV	82-04-21	149	530.12	--	--	4
13/26E-34D01	46 34 25	119 33 09	01	--	76-04-08	168	553.00	--	50	4
13/26E-35G01	46 34 19	119 31 16	01	--	69-05-08	5661	--	100	--	--
				--	69-05-08	5661	--	100	--	--
				--	69-05-08	5661	--	100	--	--
				--	69-05-10	5661	--	700	--	--
				--	69-05-19	5661	--	100	--	--
				--	69-05-19	5661	--	400	--	--
				--	69-05-20	5661	--	500	--	--
				--	69-05-26	5661	--	<10	--	--
				--	69-05-27	5661	--	<10	--	--
				--	69-06-10	5661	--	1100	--	--
				--	69-06-11	5661	--	1100	--	--
				--	69-06-12	5661	--	800	--	--
				--	69-06-22	5661	--	100	--	--
				--	69-06-28	5661	--	1100	--	--
				--	69-06-29	5661	--	1100	--	--
				--	69-06-29	5661	--	1100	--	--
				--	69-07-02	5661	--	900	--	--
				--	69-07-14	5661	--	1300	--	--
				--	69-08-11	5661	--	100	--	--
13/27E-07K01	46 37 39	119 28 39	01	--	74-11-19	39	--	110	--	3
13/27E-07P01	46 37 16	119 28 56	01	--	81-04-22	90	453.70	--	--	1
13/27E-09D01	46 38 04	119 26 50	01	--	80-04-21	150	400.70	--	--	6
13/27E-15L02	46 36 45	119 25 24	01	--	81-04-23	110	394.00	--	--	4
13/27E-16G01	46 36 55	119 25 12	01	112GLCV	82-04-20	84	414.29	--	--	4
13/27E-16M01	46 36 40	119 27 02	01	--	81-04-22	84	434.12	--	--	<1

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
13/26E-14R01	81-04-23	--	--	--	--	--	--	<1	--	--
13/26E-22E01	80-04-22	--	--	--	--	--	--	<1	--	--
13/26E-26R03	78-04-17	--	--	--	--	--	--	0	--	ND
	81-04-22	--	--	--	--	--	--	<1	--	--
13/26E-28M01	80-04-22	--	--	--	--	--	--	<1	--	--
13/26E-31K01	77-04-27	--	<100	--	ND	--	ND	2	--	ND
13/26E-31R01	79-04-17	--	--	--	--	--	--	0	--	--
13/26E-34C01	74-11-20	34	--	<20	--	<3	ND	0	<2	<2
	76-04-08	--	40	--	ND	--	<8	0	--	ND
	77-04-27	--	<100	--	ND	--	ND	0	--	ND
	78-04-17	--	--	--	--	--	--	0	--	ND
	79-04-17	--	--	--	--	--	--	0	--	--
	81-04-22	--	--	--	--	--	--	<1	--	--
	82-04-21	--	--	--	--	--	--	<1	--	--
13/26E-34D01	76-04-08	--	90	--	<2	--	14	0	--	33
13/26E-35G01	69-05-08	--	--	--	--	--	<5	--	--	--
	69-05-08	--	--	--	--	--	<5	--	--	--
	69-05-08	--	--	--	--	--	<5	--	--	--
	69-05-10	--	--	--	--	--	<5	--	--	--
	69-05-19	--	--	--	--	--	<5	--	--	--
	69-05-19	--	--	--	--	--	<5	--	--	--
	69-05-20	--	--	--	--	--	<5	--	--	--
	69-05-26	--	--	--	--	--	<5	--	--	--
	69-05-27	--	--	--	--	--	<5	--	--	--
	69-06-10	--	--	--	--	--	--	--	--	--
	69-06-11	--	--	--	--	--	--	--	--	--
	69-06-12	--	--	--	--	--	--	--	--	--
	69-06-22	--	--	--	--	--	--	--	--	--
	69-06-28	--	--	--	--	--	--	--	--	--
	69-06-29	--	--	--	--	--	--	--	--	--
	69-06-29	--	--	--	--	--	--	--	--	--
	69-07-02	--	--	--	--	--	--	--	--	--
	69-07-14	--	--	--	--	--	--	--	--	--
	69-08-11	--	--	--	--	--	--	--	--	--
13/27E-07K01	74-11-19	62	--	<20	--	<3	ND	0	3	3
13/27E-07P01	81-04-22	--	--	--	--	--	--	<1	--	--
13/27E-09D01	80-04-21	--	--	--	--	--	--	1	--	--
13/27E-15L02	81-04-23	--	--	--	--	--	--	<1	--	--
13/27E-16G01	82-04-20	--	--	--	--	--	--	<1	--	--
13/27E-16M01	81-04-22	--	--	--	--	--	--	<1	--	--

TABLE 3.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
13/26E-14R01	81-04-23	--	--	1	--	--	--	--
13/26E-22E01	80-04-22	--	--	1	--	--	--	--
13/26E-26R03	78-04-17	--	--	<1	--	--	--	--
	81-04-22	--	--	<1	--	--	--	--
13/26E-28M01	80-04-22	--	--	<1	--	--	--	--
13/26E-31K01	77-04-27	--	ND	1	--	ND	--	8
13/26E-31R01	79-04-17	--	--	<1	--	--	--	--
13/26E-34C01	74-11-20	<3	--	1	<0	--	<8	--
	76-04-08	--	<8	11	--	<2	--	ND
	77-04-27	--	ND	15	--	ND	--	<20
	78-04-17	--	--	12	--	--	--	--
	79-04-17	--	--	14	--	--	--	--
	81-04-22	--	--	7	--	--	--	--
	82-04-21	--	--	9	--	--	--	--
13/26E-34D01	76-04-08	--	<10	6	--	<2	--	70
13/26E-35G01	69-05-08	--	--	--	--	--	--	--
	69-05-08	--	--	--	--	--	--	--
	69-05-08	--	--	--	--	--	--	--
	69-05-10	--	--	--	--	--	--	--
	69-05-19	--	--	--	--	--	--	--
	69-05-19	--	--	--	--	--	--	--
	69-05-20	--	--	--	--	--	--	--
	69-05-26	--	--	--	--	--	--	--
	69-05-27	--	--	--	--	--	--	--
	69-06-10	--	--	--	--	--	--	--
	69-06-11	--	--	--	--	--	--	--
	69-06-12	--	--	--	--	--	--	--
	69-06-22	--	--	--	--	--	--	--
	69-06-28	--	--	--	--	--	--	--
	69-06-29	--	--	--	--	--	--	--
	69-06-29	--	--	--	--	--	--	--
	69-07-02	--	--	--	--	--	--	--
	69-07-14	--	--	--	--	--	--	--
	69-08-11	--	--	--	--	--	--	--
13/27E-07K01	74-11-19	10	--	<1	<0	--	50	--
13/27E-07P01	81-04-22	--	--	9	--	--	--	--
13/27E-09D01	80-04-21	--	--	2	--	--	--	--
13/27E-15L02	81-04-23	--	--	<1	--	--	--	--
13/27E-16G01	82-04-20	--	--	4	--	--	--	--
13/27E-16M01	81-04-22	--	--	1	--	--	--	--

TABLE 3.--Continued

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
13/27E-22M01	46 35 50	119 25 41	01	--	80-04-23	58	414.60	--	--	14
13/27E-28D01	46 34 39	119 25 08	01	--	78-04-19	167	537.00	--	--	7
13/27E-30N01	46 34 38	119 29 34	01	--	75-06-11	125	467.00	--	--	4
				--	80-04-23	125	466.80	--	--	<1
13/27E-31N01	46 33 49	119 29 36	01	--	77-04-28	195	577.00	--	<100	2
13/27E-34R01	46 33 57	119 24 30	01	--	78-04-17	297	522.00	--	--	5
				--	81-04-22	297	522.02	--	--	5
13/27E-35R01	46 34 33	119 23 40	01	--	81-04-23	84	424.98	--	--	1
13/27E-36G04	46 34 24	119 22 34	01	112SCBD	74-11-19	84	--	5	--	10
13/28E-31P01	46 33 55	119 20 40	01	112GLCV	82-04-20	48	--	--	--	5
14/26E-14M03	46 42 00	119 31 55	01	--	78-04-18	80	449.00	--	--	4
14/26E-23D01	46 41 35	119 32 00	01	--	79-04-18	91	470.00	--	--	5
14/26E-24F02	46 41 09	119 30 16	01	--	81-04-22	43	422.15	--	--	2
14/26E-25N01	46 40 03	119 30 44	01	--	80-04-21	150	435.30	--	--	6
14/26E-27B01	46 40 41	119 32 42	01	--	79-04-18	83	459.00	--	--	11
14/26E-28G01	46 40 24	119 34 00	01	--	77-04-27	80	458.00	--	<100	2
14/26E-32L03	46 39 17	119 35 30	01	--	79-04-18	51	422.00	--	--	3
14/26E-33N01	46 39 14	119 34 22	01	--	80-04-21	150	469.90	--	--	3
14/26E-34D01	46 39 45	119 33 20	01	112GLCV	82-04-21	150	439.55	--	--	2
14/27E-18H02	46 42 11	119 28 35	01	--	79-04-18	55	410.00	--	--	10
14/27E-32N02	46 39 01	119 28 07	01	--	80-04-21	150	412.30	--	--	7
14/27E-33G01	46 39 28	119 26 14	01	--	79-04-17	67	407.00	--	--	3

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)
13/27E-22M01	80-04-23	--	--	--	--	--	--	<1	--	--
13/27E-28D01	78-04-19	--	--	--	--	--	--	5	--	ND
13/27E-30N01	75-06-11	--	--	--	--	--	<20	0	22	--
	80-04-23	--	--	--	--	--	--	<1	--	--
13/27E-31N01	77-04-28	--	<100	--	ND	--	ND	0	--	ND
13/27E-34R01	78-04-17	--	--	--	--	--	--	0	--	ND
	81-04-22	--	--	--	--	--	--	5	--	--
13/27E-35R01	81-04-23	--	--	--	--	--	--	<1	--	--
13/27E-36G04	74-11-19	20	--	5	--	<2	ND	0	2	2
13/28E-31P01	82-04-20	--	--	--	--	--	--	7	--	--
14/26E-14M03	78-04-18	--	--	--	--	--	--	290	--	ND
14/26E-23D01	79-04-18	--	--	--	--	--	--	100	--	--
14/26E-24F02	81-04-22	--	--	--	--	--	--	<1	--	--
14/26E-25N01	80-04-21	--	--	--	--	--	--	5	--	--
14/26E-27B01	79-04-18	--	--	--	--	--	--	120	--	--
14/26E-28G01	77-04-27	--	<100	--	ND	--	ND	0	--	ND
14/26E-32L03	79-04-18	--	--	--	--	--	--	60	--	--
14/26E-33N01	80-04-21	--	--	--	--	--	--	110	--	--
14/26E-34D01	82-04-21	--	--	--	--	--	--	2	--	--
14/27E-18H02	79-04-18	--	--	--	--	--	--	1500	--	--
14/27E-32N02	80-04-21	--	--	--	--	--	--	<1	--	--
14/27E-33G01	79-04-17	--	--	--	--	--	--	0	--	--

TABLE 3.--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
13/27E-22M01	80-04-23	--	--	1	--	--	--	--
13/27E-28Q01	78-04-19	--	--	1	--	--	--	--
13/27E-30N01	75-06-11	--	--	5	--	--	--	--
	80-04-23	--	--	<1	--	--	--	--
13/27E-31N01	77-04-28	--	2	<1	--	ND	--	3
13/27E-34R01	78-04-17	--	--	2	--	--	--	--
	81-04-22	--	--	3	--	--	--	--
13/27E-35B01	81-04-23	--	--	10	--	--	--	--
13/27E-36G04	74-11-19	5	--	1	<0	--	7	--
13/28E-31R01	82-04-20	--	--	3	--	--	--	--
14/26E-14M03	78-04-18	--	--	1	--	--	--	--
14/26E-23D01	79-04-18	--	--	<1	--	--	--	--
14/26E-24F02	81-04-22	--	--	<1	--	--	--	--
14/26E-25N01	80-04-21	--	--	2	--	--	--	--
14/26E-27B01	79-04-18	--	--	<1	--	--	--	--
14/26E-28G01	77-04-27	--	2	<1	--	ND	--	8
14/26E-32L03	79-04-18	--	--	<1	--	--	--	--
14/26E-33N01	80-04-21	--	--	1	--	--	--	--
14/26E-34D01	82-04-21	--	--	1	--	--	--	--
14/27E-18M02	79-04-18	--	--	1	--	--	--	--
14/27E-32N02	80-04-21	--	--	1	--	--	--	--
14/27E-33G01	79-04-17	--	--	<1	--	--	--	--

TABLE 3.--Continued

KLICKITAT

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)
03/10E-13N01	45 44 24	121 30 09	01	--	71-10-13	543	610.00	50	<30	<50
03/12E-27N01	45 42 43	121 17 50	01	--	71-10-13	110	540.00	220	<30	<50
06/13E-10R01S	46 01 03	121 09 27	01	1108SLT	73-12-04	--	1330.00	--	--	ND

LOCAL IDENTIFIER	DATE OF SAMPLE	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, DISSOLVED (UG/L AS ZN)
03/10E-13N01	71-10-13	<100	--	1500
03/12E-27N01	71-10-13	<100	--	30
06/13E-10R01S	73-12-04	ND	<.5	ND

TABLE 3.--Continued
HORSE HEAVEN HILLS

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
02/15E-17M03	45 39 25	120 59 04	03	--	71-10-13	475	172.00	100	--	--
				--	72-04-24	475	--	<10	--	--
03/15E-11N01	45 45 10	120 54 06	01	122WNPW	82-07-14	100	1600.00	--	10	1
04/16E-03L01	45 51 35	120 47 28	01	--	71-02-15	319	1940.00	<10	--	--
05/23E-30D01	45 53 41	119 59 27	01	122WNPW	82-03-29	843	900.00	--	10	<1
05/26E-05N02	45 56 28	119 36 00	02	122WNPW	82-03-30	525	435.00	--	10	<1
05/28E-05D01	45 57 03	119 20 51	01	--	71-10-18	455	--	--	0	--
05/28E-06P01	45 56 22	119 21 12	01	--	71-09-24	556	--	--	0	--
06/23E-11N01	46 00 45	119 52 21	01	--	70-10-21	892	--	<10	--	--
				--	70-12-11	892	--	<10	--	--
06/23E-11P01	46 00 45	119 53 55	01	--	70-10-21	892	--	<10	--	--
				--	70-12-11	892	--	<10	--	--
06/23E-15H01	46 00 13	119 54 30	01	--	70-10-22	633	--	<10	--	--
06/23E-15J01	46 00 09	119 54 35	01	--	70-10-22	633	--	<10	--	--
06/29E-08M01	46 01 06	119 13 21	01	--	71-10-19	146	--	--	200	--
07/25E-36N04	46 02 37	119 39 30	04	121YKIM	72-08-03	860	--	--	10	--
				121YKIM	72-08-04	860	730.00	--	10	--
				121YKIM	72-10-05	860	--	--	10	--
07/25E-36P01	46 02 38	119 39 28	01	122WNPW	82-03-31	860	730.00	--	10	1
09/26E-27K01	46 13 50	119 32 27	01	--	70-10-12	670	--	<10	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
02/15E-17M03	71-10-13	--	--	<30	<50	<100	--
	72-04-24	--	--	<30	<50	<100	--
03/15E-11N01	82-07-14	3	<1	<10	4	<1	--
04/16E-03L01	71-02-15	--	--	<30	<50	<100	--
05/23E-30D01	82-03-29	32	<3	<10	<1	<1	--
05/26E-05N02	82-03-30	35	<3	<10	<1	<1	--
05/28E-05D01	71-10-18	--	--	1	1	2	--
05/28E-06P01	71-09-24	--	--	0	1	5	--
06/23E-11N01	70-10-21	--	--	<30	<50	<100	--
	70-12-11	--	--	<30	<50	<100	--
06/23E-11P01	70-10-21	--	--	<30	<50	<100	--
	70-12-11	--	--	<30	<50	<100	--
06/23E-15H01	70-10-22	--	--	<30	<50	<100	--
06/23E-15J01	70-10-22	--	--	<30	<50	<100	--
06/29E-08M01	71-10-19	--	--	0	10	5	--
07/25E-36N04	72-08-03	--	--	0	0	1	.1
	72-08-04	--	--	0	1	0	.0
	72-10-05	--	--	ND	ND	5	<.5
07/25E-36P01	82-03-31	24	<3	<10	<1	<1	--
09/26E-27K01	70-10-12	--	--	<30	<50	<100	--

TABLE 3.--Continued

LOCAL IDENTIFIER	DATE OF SAMPLE	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
02/15E-17M03	71-10-13	--	--	--	<10
	72-04-24	--	--	--	<10
03/15E-11N01	82-07-14	<.1	<1	<1	47
04/16E-03L01	71-02-15	--	--	--	120
05/23E-30D01	82-03-29	<.1	<1	<1	<12
05/26E-05N02	82-03-30	<.1	<1	<1	<12
05/28E-05D01	71-10-18	--	--	--	40
05/28E-06P01	71-09-24	--	--	--	0
06/23E-11N01	70-10-21	--	--	--	<10
	70-12-11	--	--	--	<10
06/23E-11P01	70-10-21	--	--	--	<10
	70-12-11	--	--	--	<10
06/23E-15H01	70-10-22	--	--	--	<10
06/23E-15J01	70-10-22	--	--	--	<10
06/29E-08M01	71-10-19	--	--	--	150
07/25E-36N04	72-08-03	--	--	--	0
	72-08-04	--	--	--	0
	72-10-05	--	--	--	20
07/25E-36P01	82-03-31	<.1	<1	<1	20
09/26E-27K01	70-10-12	--	--	--	100

TABLE 3.--Continued
WALLA WALLA - TUCANNON

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
06/33E-08R01	46 00 29	118 42 49	01	122WNPM	82-07-13	325	563.00	--	<10	<1
06/35E-01C01	46 02 03	118 22 38	01	--	71-09-22	535	800.00	170	--	--
06/36E-07D02	46 01 13	118 21 42	01	--	70-10-23	556	833.00	<10	--	--
06/36E-07D03	46 01 12	118 21 40	01	--	70-12-02	115	835.00	<10	--	--
06/37E-05F01	46 01 40	118 12 34	01	--	70-10-23	612	1555.00	10	--	--
07/32E-36D01	46 02 13	118 44 47	01	--	71-09-20	1016	--	0	--	--
07/33E-35S01	46 02 34	118 38 35	01	112GLCV	82-06-23	100	445.00	--	20	5
07/35E-35C01	46 02 49	118 24 00	01	112GLCV	82-06-23	210	765.00	--	10	<1
07/35E-36F01	46 02 37	118 22 54	01	--	70-10-23	700	--	20	--	--
07/36E-10D01	46 06 22	118 17 58	01	--	70-12-02	240	1116.00	<10	--	--
07/36E-19R01	46 03 57	118 20 48	01	--	70-10-21	1590	925.00	<10	--	--
07/36E-20H01	46 04 21	118 19 44	01	--	70-10-22	1202	990.00	<10	--	--
07/36E-28R01	46 03 11	118 19 20	01	121CRPV	70-10-23	906	1022.00	<10	--	--
08/30E-01N01	46 11 51	119 00 32	01	112GLCV	82-06-24	58	385.00	--	10	4
08/31E-34H01	46 07 56	118 54 05	01	--	70-09-09	480	--	110	--	--
08/37E-33M01	46 07 35	118 11 37	01	--	70-10-23	490	--	60	--	--
10/37E-24G01	46 20 07	118 07 30	01	--	72-05-24	492	--	400	--	--
13/42E-13D01	46 36 58	117 29 24	01	--	72-05-24	118	--	70	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
06/33E-08R01	82-07-13	11	<1	<10	2	<1	<.1	<1	<1	21
06/35E-01C01	71-09-22	--	--	<30	<50	<100	--	--	--	<10
06/36E-07D02	70-10-23	--	--	<30	<50	<100	--	--	--	20
06/36E-07D03	70-12-02	--	--	<30	<50	<100	--	--	--	150
06/37E-05F01	70-10-23	--	--	<30	<50	<100	--	--	--	<10
07/32E-36D01	71-09-20	--	--	0	0	2	--	--	--	10
07/33E-35S01	82-06-23	300	<1	<10	26	2	<.1	<1	<1	50
07/35E-35C01	82-06-23	57	<1	<10	2	<1	<.1	<1	<1	<3
07/35E-36F01	70-10-23	--	--	<30	<50	<10	--	--	--	<10
07/36E-10D01	70-12-02	--	--	<30	<50	<100	--	--	--	100
07/36E-19R01	70-10-21	--	--	<30	<50	<100	--	--	--	<10
07/36E-20H01	70-10-22	--	--	<30	<50	<100	--	--	--	<10
07/36E-28R01	70-10-23	--	--	<30	<50	<100	--	--	--	<10
08/30E-01N01	82-06-24	76	<1	<10	18	4	<.1	<1	<1	100
08/31E-34H01	70-09-09	--	--	<30	<50	<100	--	--	--	<10
08/37E-33M01	70-10-23	--	--	<30	<50	<100	--	--	--	<10
10/37E-24G01	72-05-24	--	--	<30	<50	<100	--	--	--	<10
13/42E-13D01	72-05-24	--	--	<30	<50	<100	--	--	--	270

TABLE 3.--Continued

PALOUSE

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
13/40E-09F02	46 37 40	117 48 02	01	--	69-08-08	--	--	<10	--	--
14/44E-14P01	46 41 33	117 14 27	01	122CRRV	71-09-29	600	--	10	--	--
14/44E-14P02	46 41 32	117 14 25	02	122CRRV	82-06-21	432	2580.00	--	<10	<1
14/45E-05D03	46 43 55	117 10 49	03	122CRRV	82-06-22	167	2342.00	--	<10	<1
15/45E-29G02	46 45 32	117 10 03	01	121CRRV	70-12-02	247	--	<10	--	--
16/43E-07K01	46 53 24	117 26 38	01	--	70-12-02	190	--	<10	--	--
17/40E-08H01	46 58 57	117 47 24	01	--	70-12-02	102	--	<10	--	--
18/45E-01L02	47 05 09	117 04 38	01	--	71-09-29	419	--	10	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
13/40E-09F02	69-08-08	--	--	--	--	--	--	--	--	--
14/44E-14P01	71-09-29	--	--	<30	<50	<100	--	--	--	<10
14/44E-14P02	82-06-21	37	<1	<10	1	2	.1	<1	<1	79
14/45E-05D03	82-06-22	98	<1	<10	1	<1	.4	<1	<1	3
15/45E-29G02	70-12-02	--	--	<30	<50	<100	--	--	--	100
16/43E-07K01	70-12-02	--	--	<30	<50	<100	--	--	--	50
17/40E-08H01	70-12-02	--	--	<30	<50	<100	--	--	--	<10
18/45E-01L02	71-09-29	--	--	<30	<50	<100	--	--	--	<10

TABLE 3.--Continued

BLUE MOUNTAINS

LOCAL IDENTIFIER	LATITUDE	LONGITUDE	SEQ. NO.	GEOLOGIC UNIT	DATE OF SAMPLE	DEPTH OF WELL, TOTAL (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)
08/45E-26P01	46 08 04	117 09 04	01	--	71-09-30	100	--	<10	--	--
10/44E-16D01	46 20 27	117 02 41	01	--	70-12-02	522	--	<10	--	--
10/44E-20A02	46 20 12	117 03 36	01	122GDRD	82-06-21	225	780.00	--	<10	1
11/44E-30D01	46 23 48	117 05 04	01	121CRRV	62-10-30	1330	--	200	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
08/45E-26P01	71-09-30	--	--	<30	<50	<100	--	--	--	<10
10/44E-16D01	70-12-02	--	--	<30	<50	<100	--	--	--	<10
10/44E-20A02	82-06-21	31	<1	<10	7	2	<.1	<1	<1	190
11/44E-30D01	62-10-30	--	--	--	--	--	--	--	--	--

TABLE 4.--Major ions as a percentage of total cation or anion milliequivalents, 1982 data only

EXPLANATION OF GEOLOGIC UNITS

Geologic unit codes used in this table indicate that wells are open to one or more of the following formations.

Geologic Unit Code		Formation
Basalt units:		
110	BSLT	Quaternary Basalt
122	SDLM	Saddle Mountains Basalt
122	YKIM	Saddle Mountains and Wanapum Basalts
122	WWPM	Wanapum Basalt
121, 122	CBRV	Wanapum and Grande Ronde Basalts
122	GDRD	Gronde Ronde Basalt
Unconsolidated units:		
110	ALVM	Alluvium
112	GLCV	Glaciofluvial Deposits
112	SCBD	Scabland Flood Deposits
121, 122	ELBG	Ellensburg Formation
124	RSLN	Roslyn Formation

TABLE 4.--Continued

MAJOR IONS AS A PERCENTAGE OF TOTAL CATION OR ANION MILLIEQUIVALENTS

Well Number	COUNTY	GUNIT	CA	MG	NA	K	ALK	CL	SO4	NO3
08/45E-35B01	ASOTIN	122YKIM	41	38	19	3	91	2	5	2
10/46E-20A02	ASOTIN	122GDRD	46	25	24	5	71	12	14	3
10/46E-21D01	ASOTIN	122GDRD	42	15	30	13	85	8	7	0
11N/46E-32E01	ASOTIN	122GDRD	34	6	50	9	76	13	11	0
05/24E-28G01	BENTON	122SDLM	32	30	36	2	49	19	27	5
05/24E-35R01	BENTON	122WNPM	47	19	31	3	58	14	23	6
05/26E-05N02	BENTON	122WNPM	4	1	91	5	83	15	2	0
05/27E-04C01	BENTON	122SDLM	34	31	32	3	55	10	23	12
05/28E-06R02	BENTON	122WNPM	4	2	89	5	70	17	12	0
06/26E-19K01	BENTON	122SDLM	36	31	32	2	25	21	32	21
07/24E-26B01	BENTON	122SDLM	40	26	28	5	74	7	17	2
07/25E-12R01	BENTON	122SDLM	29	17	45	9	68	12	20	0
07/25E-36P01	BENTON	122WNPM	8	4	79	10	72	16	12	0
07/26E-05B03	BENTON	122WNPM	31	18	42	9	66	11	23	0
07/27E-29Q01	BENTON	122SDLM	48	35	15	2	24	25	39	12
08/24E-01J01	BENTON	122WNPM	12	5	75	8	91	6	2	0
08/29E-17G02	BENTON	122SDLM	40	34	24	1	79	6	14	1
08/30E-07H02	BENTON	112GLCV	53	21	24	2	68	10	17	4
08/30E-17D02	BENTON	112GLCV	55	20	22	3	78	6	13	3
08/30E-19M01	BENTON	122YKIM	34	32	29	5	51	10	33	6
08/30E-22N01	BENTON	112GLCV	42	21	35	2	71	9	18	3
09/24E-04H01	BENTON	122SDLM	62	26	10	2	59	9	24	8
09/27E-07D01	BENTON	122SDLM	48	30	20	2	77	6	13	3
09/28E-04G01	BENTON	122SDLM	13	4	76	6	92	5	2	0
09/28E-06A02	BENTON	122SDLM	36	32	28	4	49	6	45	0
09/28E-17A01	BENTON	122YKIM	13	10	71	6	80	7	14	0
09/28E-27K01	BENTON	122YKIM	39	35	23	3	50	12	33	5
10/28E-03P01	BENTON	112GLCV	55	19	23	4	73	7	15	5
10/28E-14C01	BENTON	112GLCV	61	20	15	3	83	2	8	7
11/26E-01F01	BENTON	112GLCV	55	25	16	4	80	5	13	2
11/27E-14C01	BENTON	112GLCV	53	21	23	4	53	6	31	9
11/27E-17B01	BENTON	112GLCV	58	25	14	3	73	5	21	1
11/27E-22D01	BENTON	112GLCV	55	22	20	3	51	11	37	0
11/28E-03R01	BENTON	112GLCV	51	26	19	3	74	5	14	6
11/28E-23D01	BENTON	112GLCV	47	26	22	5	75	5	12	9
11/28E-29P01	BENTON	112GLCV	51	19	26	4	63	12	22	3
12/26E-13A01	BENTON	112GLCV	42	22	32	4	57	8	24	11
12/26E-18G01	BENTON	112GLCV	49	26	22	3	68	10	15	8
12/27E-01G01	BENTON	112GLCV	46	27	24	3	52	7	27	13
12/27E-33J01	BENTON	112GLCV	53	22	22	4	57	6	27	9
12/27E-35J01	BENTON	112GLCV	58	20	19	4	51	4	37	7
12/28E-05H01	BENTON	112GLCV	51	25	21	3	60	8	20	13
12/28E-31H01	BENTON	112GLCV	.	.	.	.	50	13	34	3
13/26E-34C01	BENTON	112GLCV	53	11	31	5	13	10	76	1
13/27E-16G01	BENTON	112GLCV	53	20	24	2	36	10	48	6
13/28E-31R01	BENTON	112GLCV	49	26	22	3	56	8	25	11
14/26E-34D01	BENTON	112GLCV	63	27	8	3	84	2	14	1
10/39E-20G01	COLUMBIA	122GDRD	54	30	15	2	84	3	5	8
10/39E-32C01	COLUMBIA	122GDRD	54	30	13	3	88	3	6	3
12/42E-33Q01	GARFIELD	122CBRV	54	30	13	3	79	7	8	6
12/42E-34R01	GARFIELD	122GDRD	55	29	13	4	87	4	5	4
17/18E-04B01	KITTITAS	112GLCV	52	33	11	4	88	3	5	4
17/18E-11E01	KITTITAS	112GLCV	41	17	38	4	91	2	5	1
17/19E-05M01	KITTITAS	112GLCV	42	38	18	1	94	2	4	1
17/19E-11M01	KITTITAS	112GLCV	43	34	20	3	81	7	6	6
18/18E-26F01	KITTITAS	112GLCV	44	41	14	2	93	2	3	2

TABLE 4.--Continued

MAJOR IONS AS A PERCENTAGE OF TOTAL CATION OR ANION MILLIEQUIVALENTS

Well Number	COUNTY	GUNIT	CA	MG	NA	K	ALK	CL	SO4	NO3
18/18E-28C01	KITTITAS	112GLCV	43	32	24	2	89	4	4	4
20/13E-11C01	KITTITAS	112GLCV	61	24	13	1	82	5	12	1
20/14E-10A03	KITTITAS	112GLCV	40	54	6	1	90	1	8	1
20/14E-27J02	KITTITAS	112GLCV	65	26	8	1	93	2	5	0
20/15E-34N01	KITTITAS	124RSLN	35	53	11	1	52	7	8	33
03/11E-05N03	KLICKITAT	122GDRD	39	48	10	3	96	2	2	0
03/12E-16Q01	KLICKITAT	122WNPM	41	45	11	3	93	2	4	2
03/15E-11N01	KLICKITAT	122WNPM	43	30	26	1	72	9	5	15
04/15E-15G01	KLICKITAT	122WNPM	22	58	18	2	98	1	1	0
04/16E-32A01	KLICKITAT	122WNPM	46	26	25	3	74	6	6	13
05/20E-28B01	KLICKITAT	122WNPM	40	29	27	4	91	4	4	0
05/23E-13R02	KLICKITAT	122WNPM	3	1	87	9	91	6	3	0
05/23E-30D01	KLICKITAT	122WNPM	20	17	53	10	90	5	5	0
06/20E-30P01	KLICKITAT	122WNPM	45	33	19	3	82	2	5	11
06/23E-24A01	KLICKITAT	122WNPM	8	5	76	10	91	7	3	0
06/33E-03R01	WALLA WALLA	112GLCV	52	22	23	2	68	8	24	1
06/33E-08P01	WALLA WALLA	122WNPM	40	26	30	4	57	18	17	8
06/36E-04A03	WALLA WALLA	112GLCV	44	28	26	2	85	5	5	5
06/36E-07E02	WALLA WALLA	122WNPM	41	21	34	5	85	6	9	0
06N/34E-07R01	WALLA WALLA	122WNPM	22	9	64	5	48	40	11	1
07/31E-10R01	WALLA WALLA	112GLCV	42	20	35	3	75	12	12	1
07/32E-07M01	WALLA WALLA	122SDLM	17	5	68	10	73	23	4	0
07/33E-35G01	WALLA WALLA	112GLCV	30	19	50	1	77	15	4	4
07/34E-21M03	WALLA WALLA	122WNPM	34	13	47	6	85	7	7	1
07/34E-36B02	WALLA WALLA	112GLCV	49	28	20	4	65	19	12	4
07/35E-31B01	WALLA WALLA	122WNPM	49	23	25	4	66	21	12	1
07/35E-32H02	WALLA WALLA	112GLCV	43	29	25	4	64	19	11	7
07/35E-33H03	WALLA WALLA	122WNPM	41	18	35	6	87	7	5	1
07/35E-35C01	WALLA WALLA	112GLCV	44	29	24	4	67	10	13	10
07/36E-10B01	WALLA WALLA	122WNPM	41	26	29	4	93	2	5	0
07/36E-27N04	WALLA WALLA	112GLCV	49	34	15	2	88	2	5	4
07/36E-30R01	WALLA WALLA	112GLCV	48	33	14	5	71	7	11	12
08/30E-01N01	WALLA WALLA	112GLCV	51	21	26	3	63	15	15	7
09/30E-35R01	WALLA WALLA	112GLCV	53	22	22	3	77	8	10	5
14/44E-14P02	WHITMAN	122CBRV	40	33	26	2	94	2	4	0
14/45E-05D03	WHITMAN	122CBRV	34	36	27	3	91	4	5	0
14/45E-08E01	WHITMAN	122GDRD	36	35	26	3	94	2	4	0
14/46E-19M01	WHITMAN	122WNPM	47	35	16	2	91	3	6	0
15/45E-07R03	WHITMAN	122ELBG	52	30	17	2	94	1	5	1
15/45E-29G03	WHITMAN	122CBRV	35	38	24	3	72	2	26	0
16/45E-16F01	WHITMAN	122WNPM	40	39	19	3	93	2	5	0
19/44E-21M01	WHITMAN	122CBRV	53	26	20	2	85	3	7	6
07/22E-09E01	YAKIMA	122WNPM	47	31	21	1	80	9	10	2
07/22E-36H01	YAKIMA	122SDLM	25	23	42	11	77	7	15	0
07/23E-36R01	YAKIMA	122WNPM	13	6	71	11	90	6	3	0
08/22E-03K01	YAKIMA	122SDLM	46	29	24	1	46	11	21	22
08/22E-12N01	YAKIMA	122YKIM	50	31	17	2	41	8	35	15
09/21E-17C01	YAKIMA	122ELBG	51	30	16	2	79	8	11	1
09/22E-10R01	YAKIMA	112GLCV	45	25	26	4	89	3	7	0
09/23E-25G01	YAKIMA	122SDLM	36	36	27	2	86	2	7	5
10/17E-07R01	YAKIMA	112GLCV	42	36	17	5	91	2	6	1
10/20E-04L01	YAKIMA	122ELBG	30	19	46	5	92	3	4	0
10/20E-19J01	YAKIMA	112GLCV	52	29	17	2	81	4	7	9
10/21E-07K01	YAKIMA	112GLCV	48	30	20	2	87	5	5	4
10/21E-34L01	YAKIMA	112GLCV	47	35	15	3	86	5	7	1
10/22E-15C01	YAKIMA	112GLCV	54	26	19	1	50	5	42	3
10/22E-36E01	YAKIMA	122WNPM	38	26	30	7	92	5	3	0
11/17E-32L02	YAKIMA	122ELBG	37	36	24	3	92	2	4	2
11/19E-10Q01	YAKIMA	122ELBG	42	14	39	5	88	3	8	1
11/19E-27H01	YAKIMA	112GLCV	51	30	16	3	80	5	9	6
11/20E-02H01	YAKIMA	122SDLM	7	1	86	5	90	6	4	0
11/20E-22R01	YAKIMA	122ELBG	43	17	36	5	71	8	20	1
11/21E-20D01	YAKIMA	122SDLM	39	19	37	5	89	5	5	0
12/17E-12J03	YAKIMA	122ELBG	39	31	24	6	91	2	6	1
12/18E-06R02	YAKIMA	112GLCV	41	31	25	3	81	6	10	4
12/19E-01E01	YAKIMA	122ELBG	31	27	41	1	89	7	3	0
12/19E-10L01	YAKIMA	122ELBG	46	27	27	1	70	10	17	2
13/17E-27C01	YAKIMA	122ELBG	35	27	35	3	85	3	9	4
13/18E-28R01	YAKIMA	112GLCV	40	39	19	2	80	6	10	4
13/19E-22J01	YAKIMA	122ELBG	37	25	37	1	81	4	10	4
13/19E-26R01	YAKIMA	122ELBG	41	20	38	2	80	6	11	3
13/19E-31B04	YAKIMA	112GLCV	57	24	16	3	66	11	14	10
14/17E-33Q01	YAKIMA	112GLCV	40	42	16	2	67	13	16	4
14/18E-12B08	YAKIMA	122SDLM	45	38	15	2	67	13	17	4
14/18E-12J02	YAKIMA	122ELBG	40	32	24	4	85	6	8	2
14/18E-25D01	YAKIMA	122ELBG	47	26	24	3	77	9	13	1
14/18E-32E01	YAKIMA	122ELBG	57	25	16	3	79	4	9	8
14/19E-32L01	YAKIMA	112GLCV	39	30	29	3	78	9	10	3

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WATER RESOURCES INVESTIGATIONS
REPORT 84-4262
PLATE 1

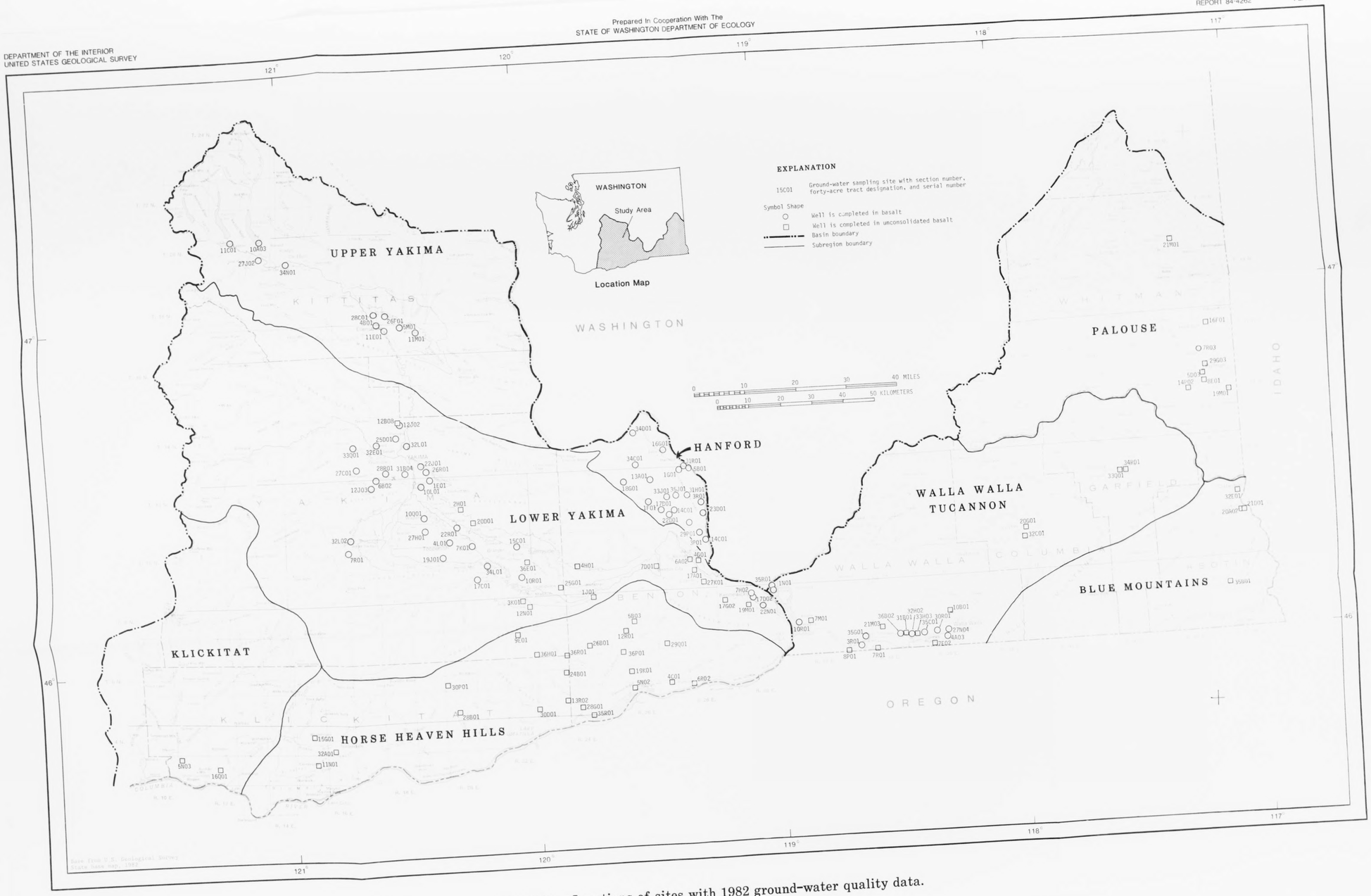

PLATE 1.--Locations of sites with 1982 ground-water quality data.

WATER RESOURCES INVESTIGATIONS
REPORT 84-4262
PLATE 2

Prepared In Cooperation With The
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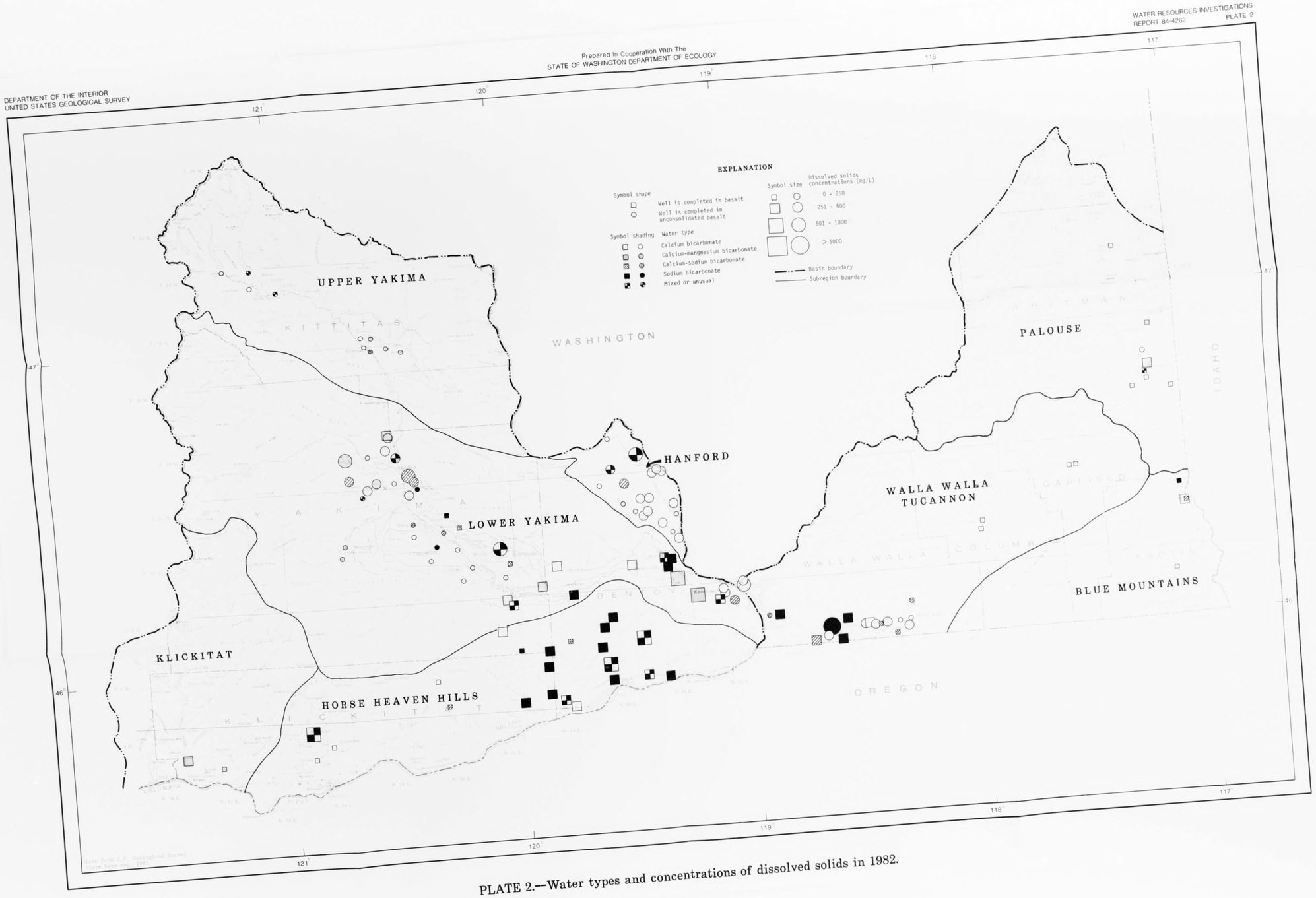

PLATE 2.--Water types and concentrations of dissolved solids in 1982.

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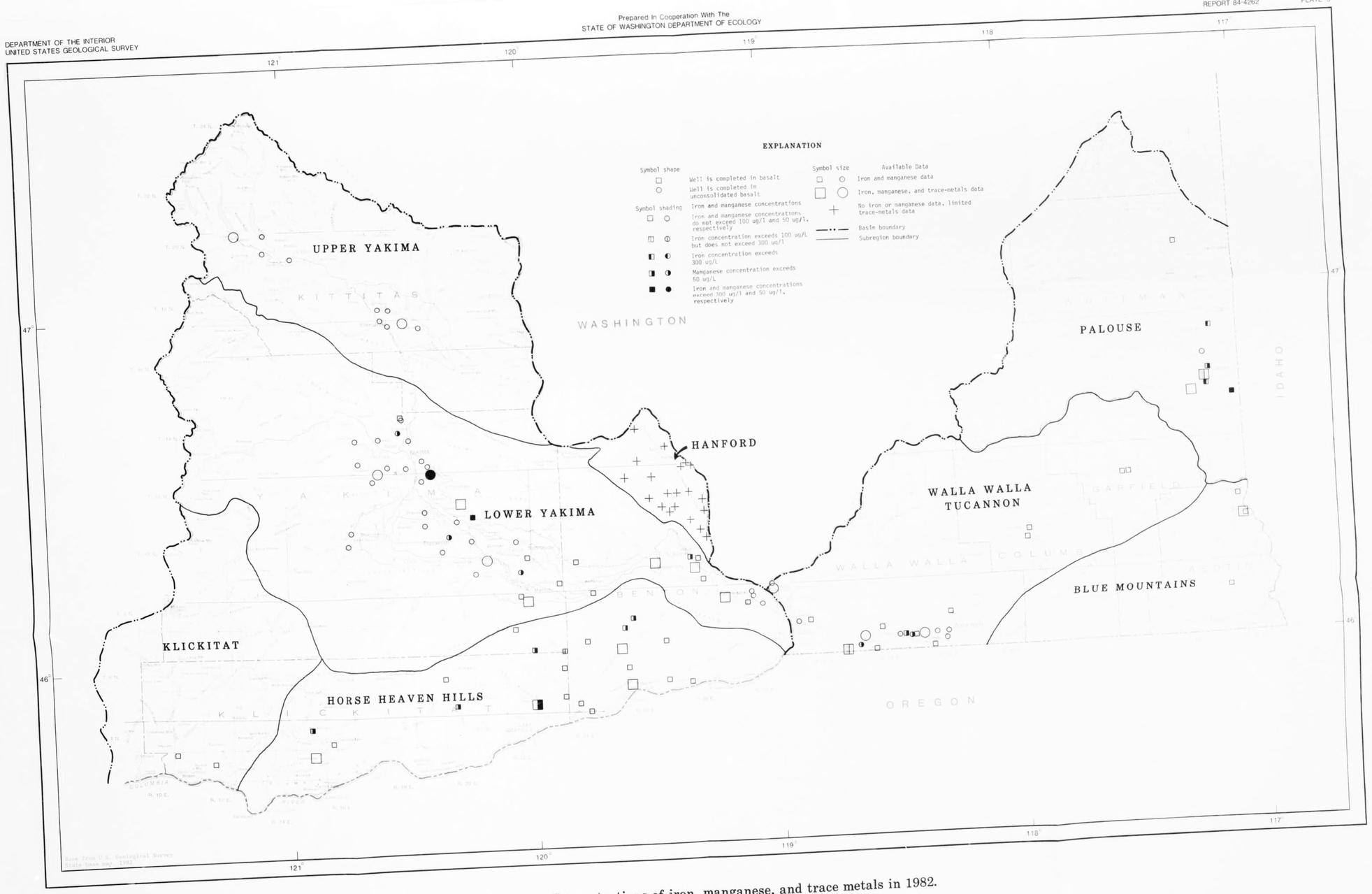

PLATE 3.--Concentrations of iron, manganese, and trace metals in 1982.

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PLATE 4.--Concentrations of nitrate in 1982.

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WATER RESOURCES INVESTIGATIONS
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PLATE 5.--Locations of sites with historical (pre-1982) ground-water quality data.